

# MANUFACTURERS' RECORD

A  
WEEKLY SOUTHERN INDUSTRIAL  
RAILROAD AND FINANCIAL NEWSPAPER.

## THE SOUTH IN 1892.

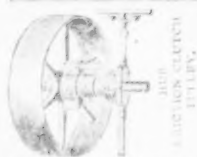
Read this issue of the MANUFACTURERS' RECORD carefully and preserve it for future reference. It contains the best statistical review of Southern affairs that has ever been published. The figures are authentic and up to date.

THE FULL TABLE OF CONTENTS WILL BE FOUND ON PAGE 172.

VOL. XXII.  
No. 23.

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Baltimore, January 6, 1893.



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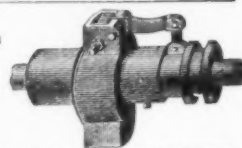
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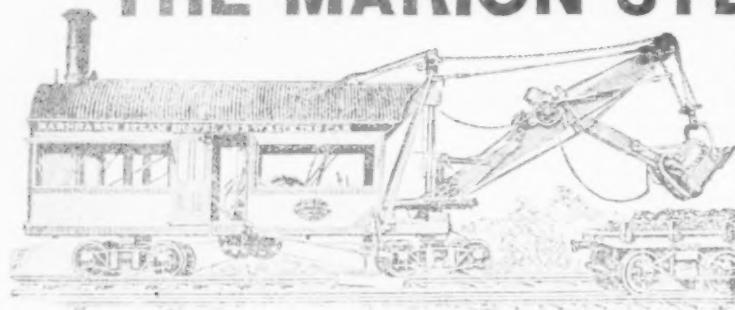
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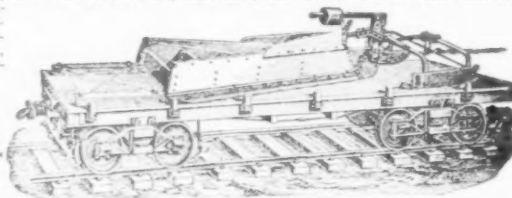


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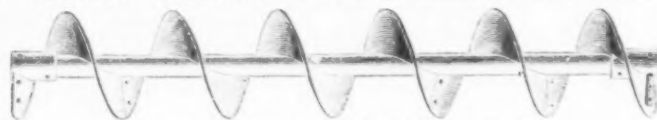


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FOR "ALPHABETICAL INDEX" SEE PAGE 46.

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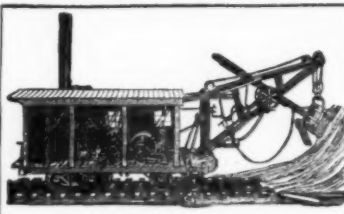
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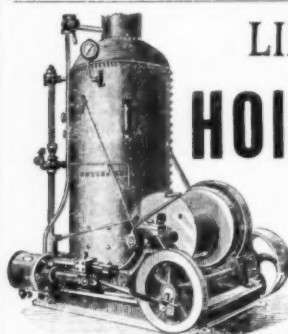


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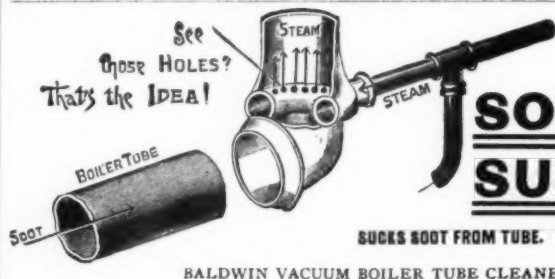
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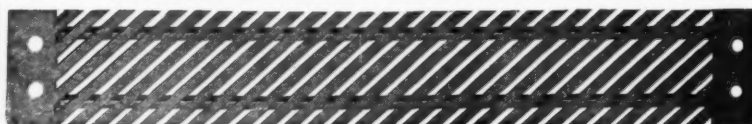
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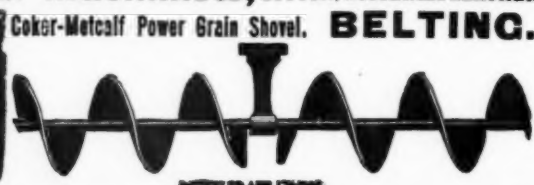
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FOR "ALPHABETICAL INDEX" SEE PAGE 46.

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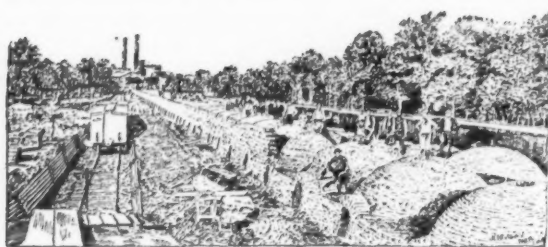
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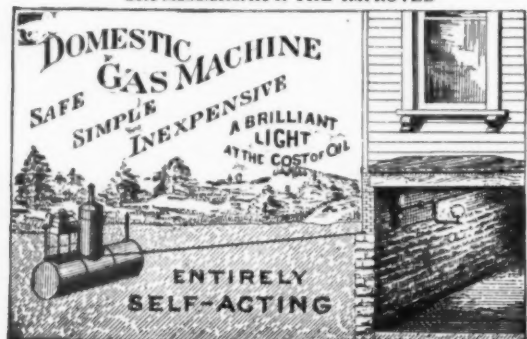
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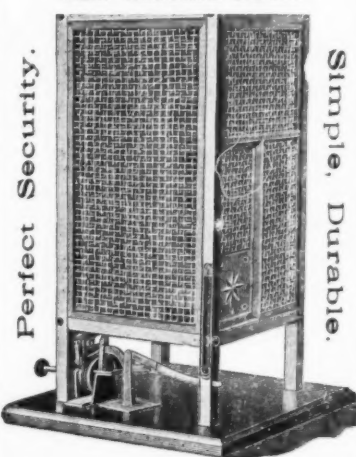
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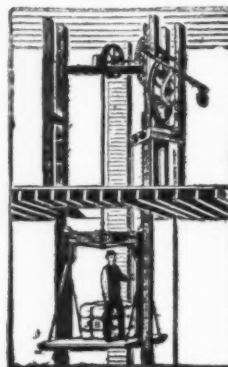
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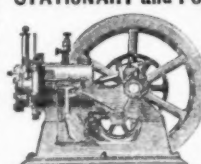
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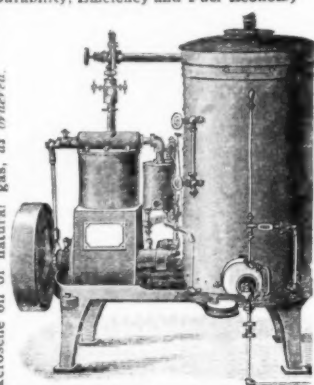
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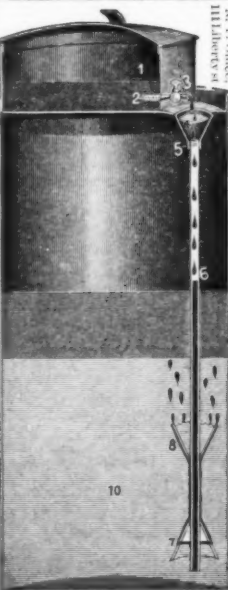
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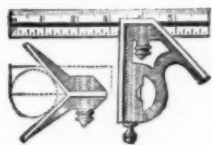
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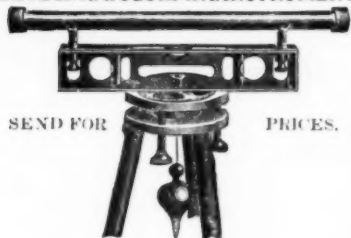
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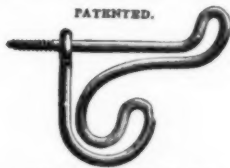
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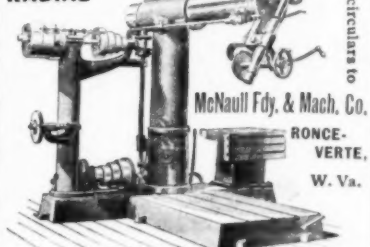
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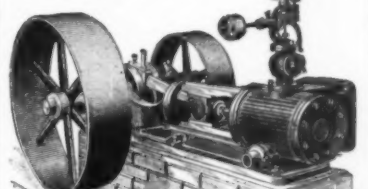
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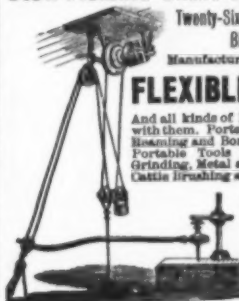
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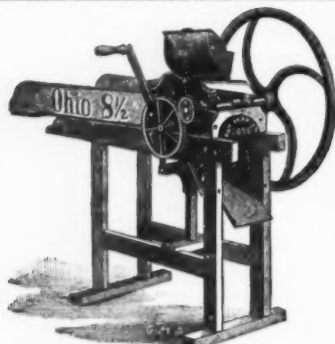
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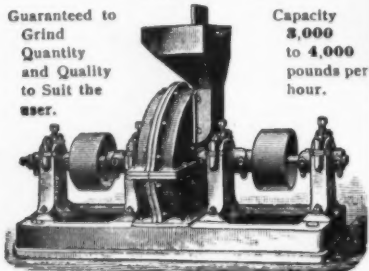
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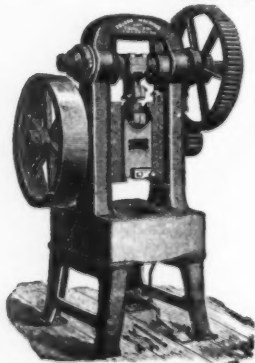
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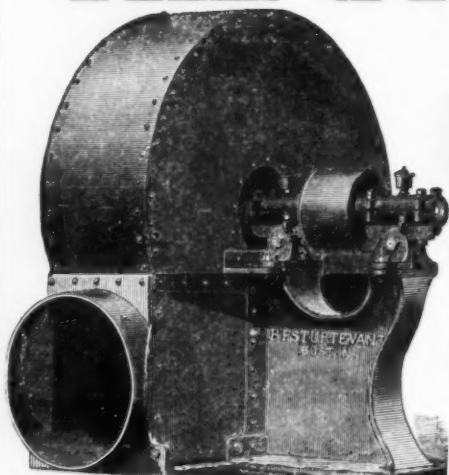
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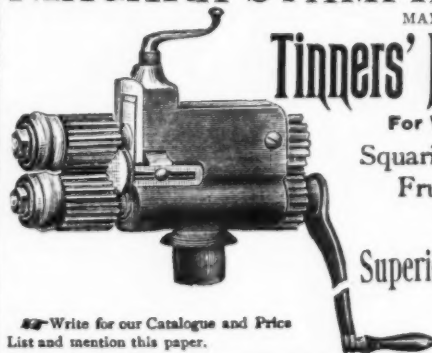
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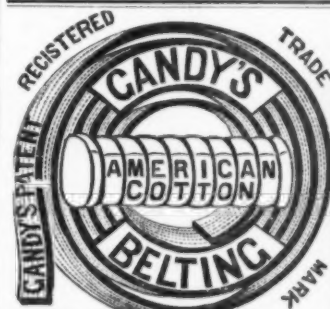
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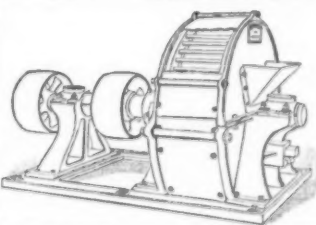
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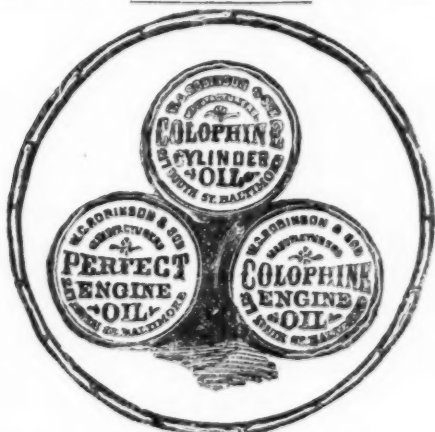
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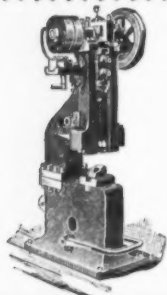
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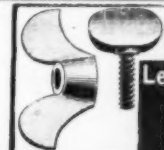
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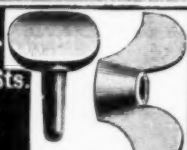


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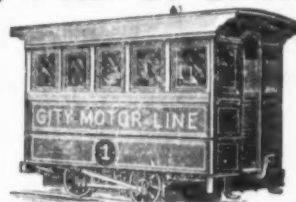
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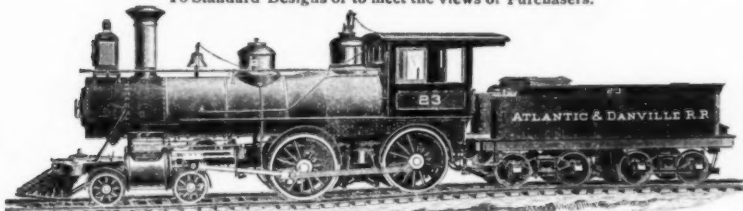
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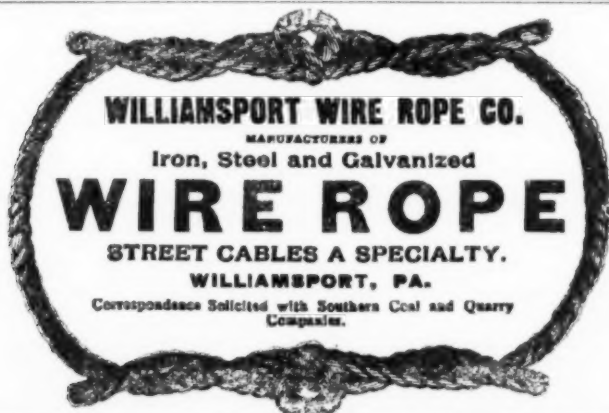
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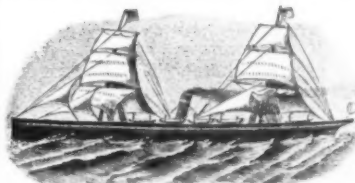
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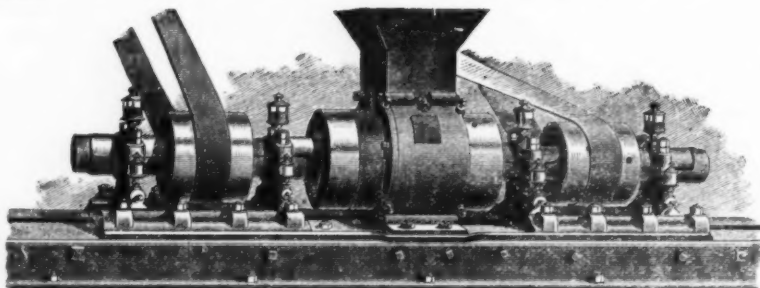
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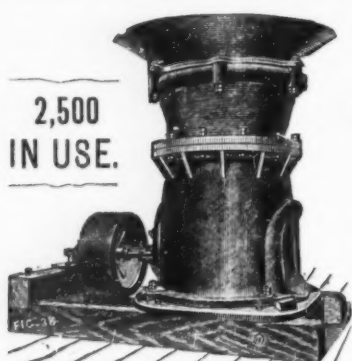
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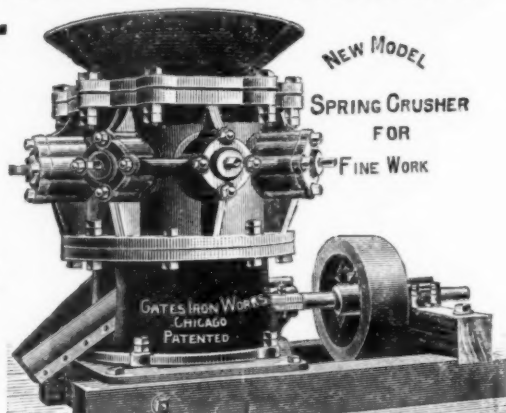
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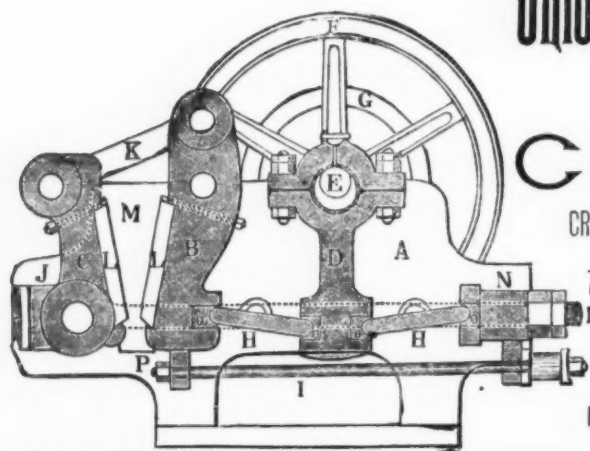
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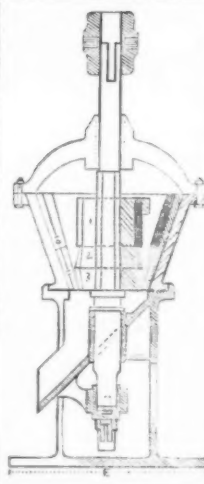
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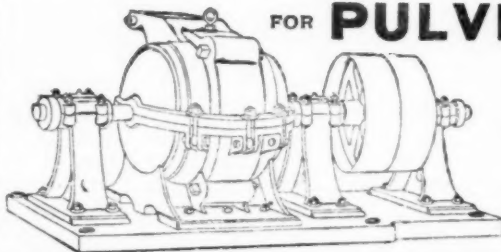
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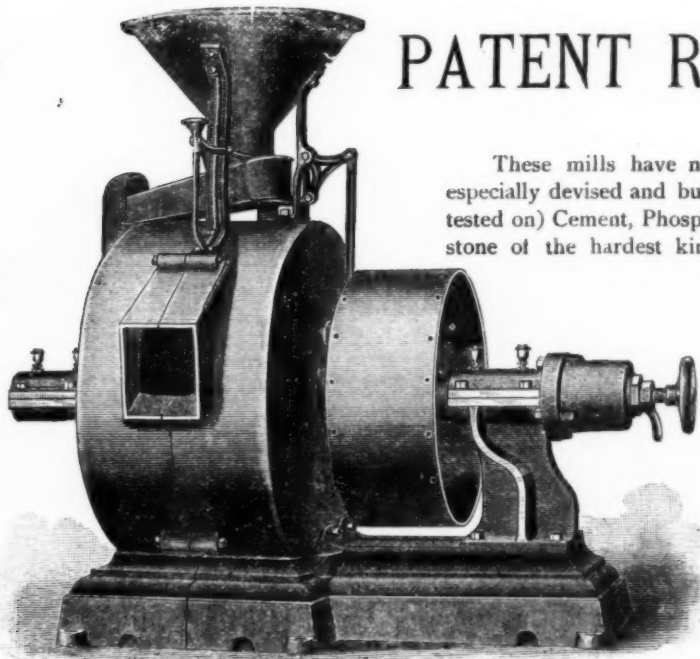
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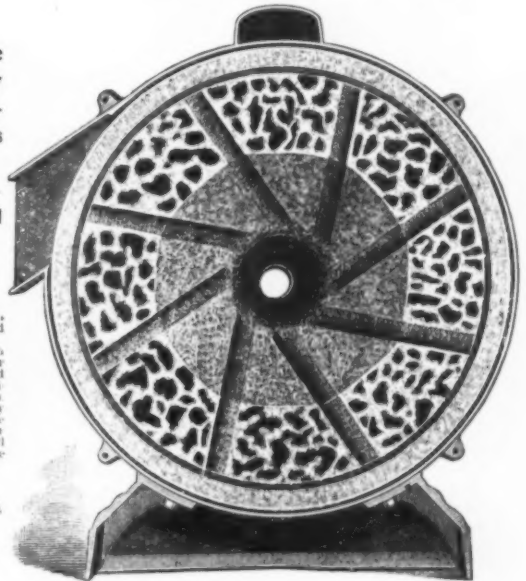


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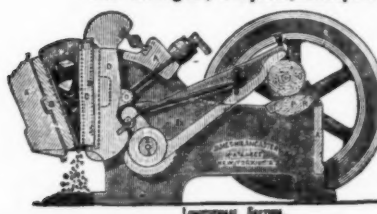
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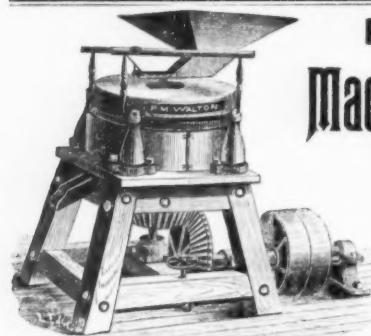
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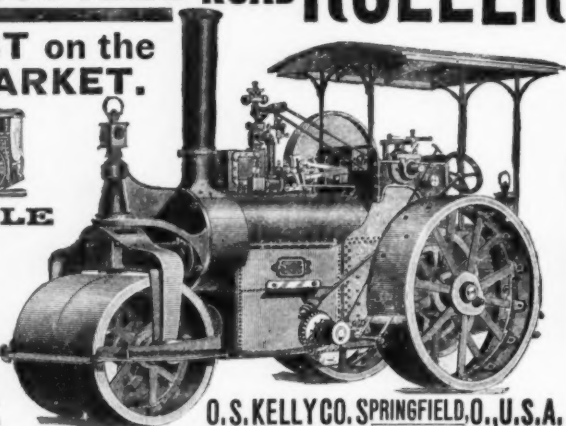
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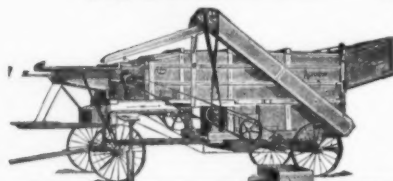
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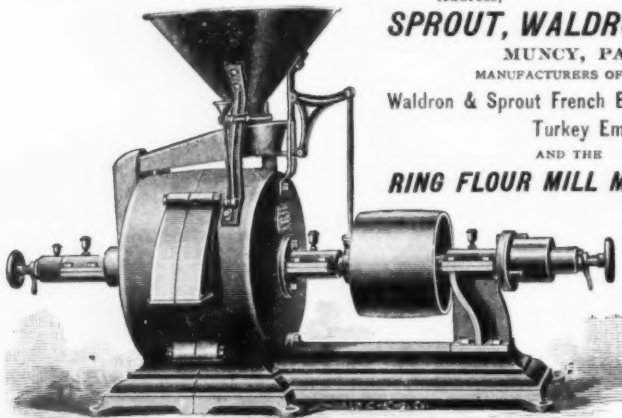
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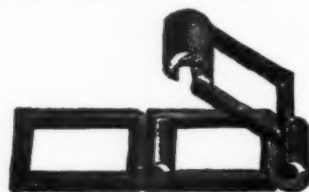
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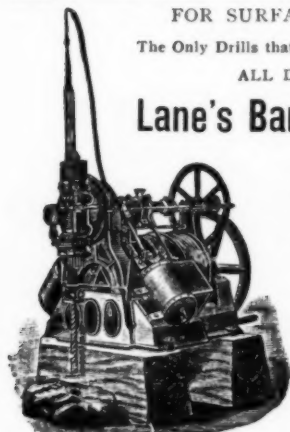
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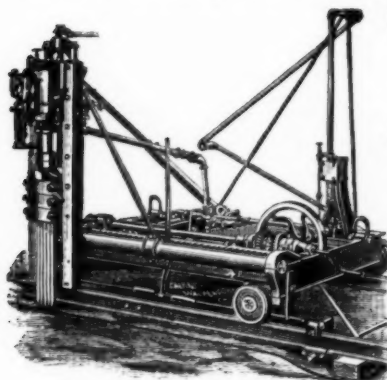
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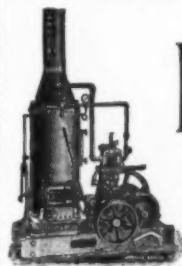
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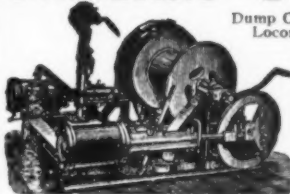
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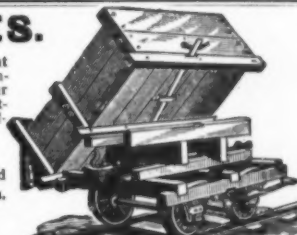
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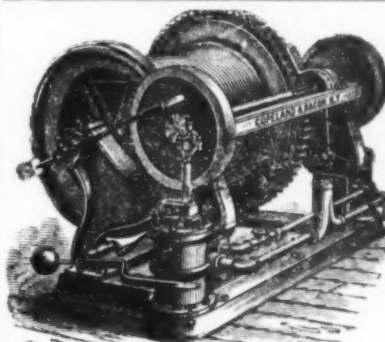
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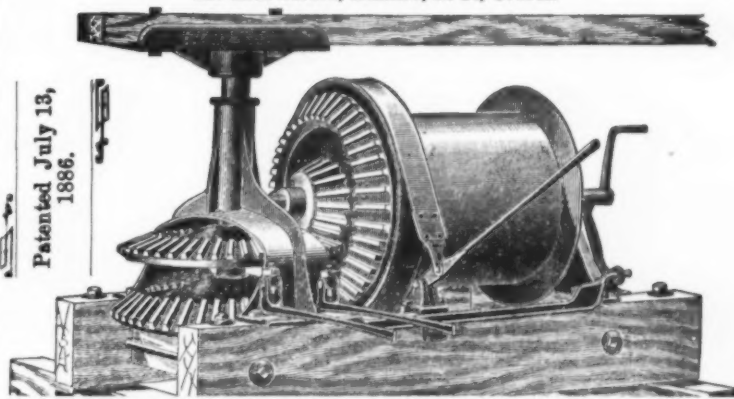
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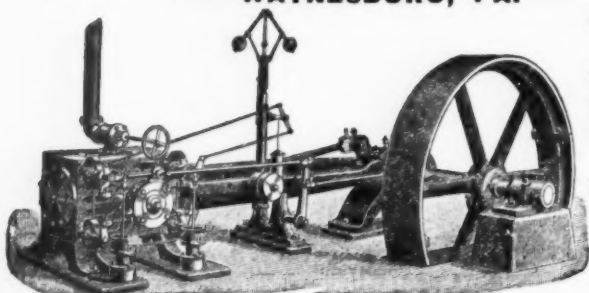
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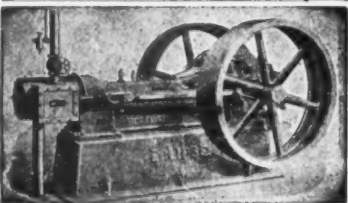
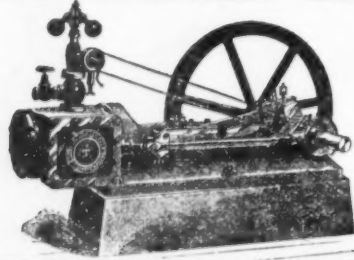
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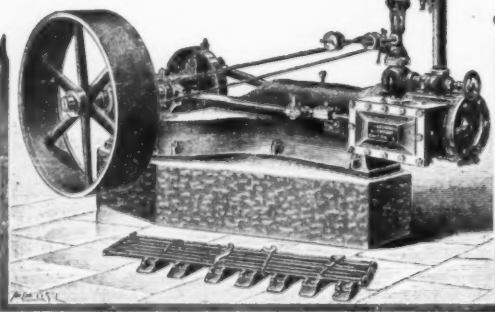
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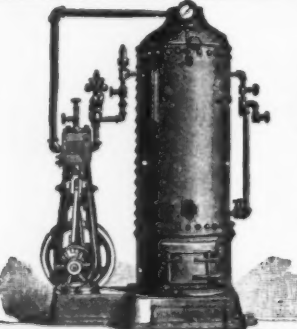
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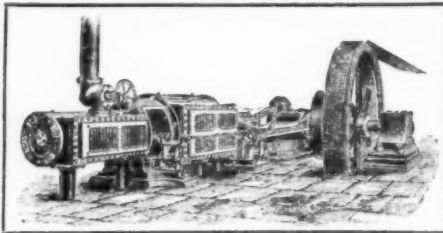
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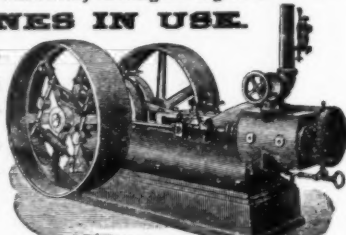
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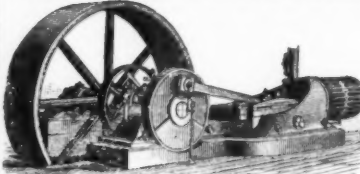
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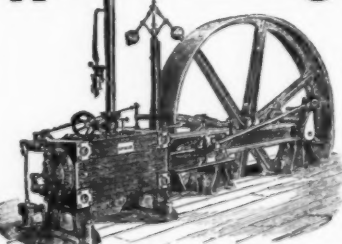
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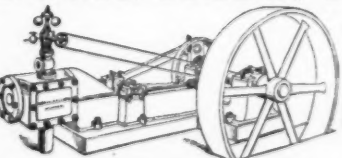
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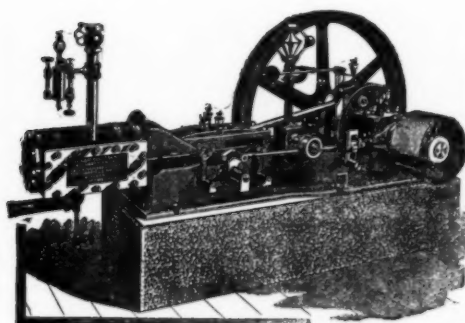
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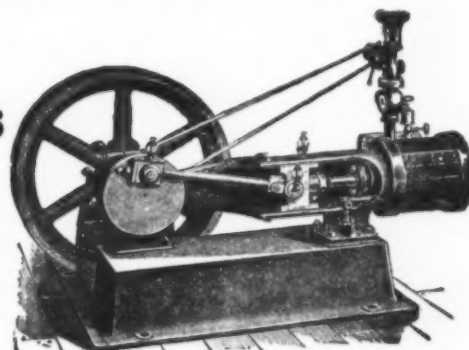
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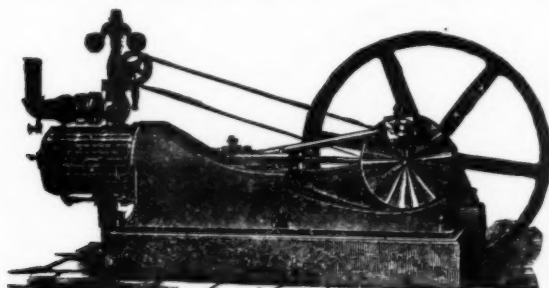
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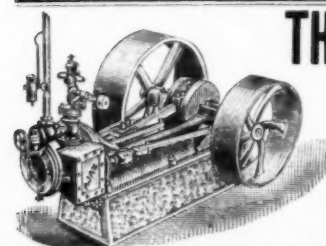


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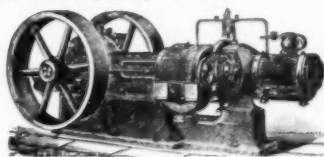
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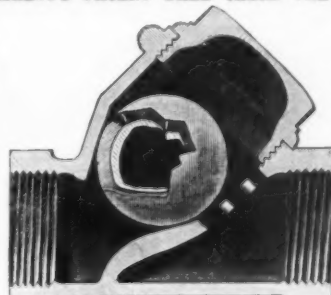
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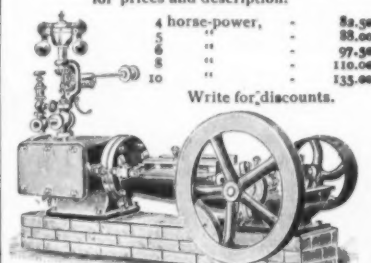
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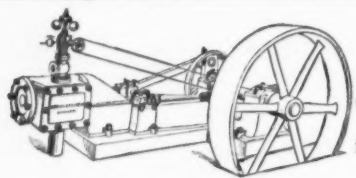
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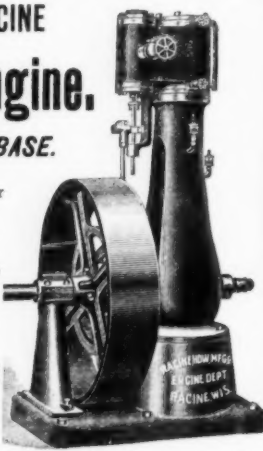
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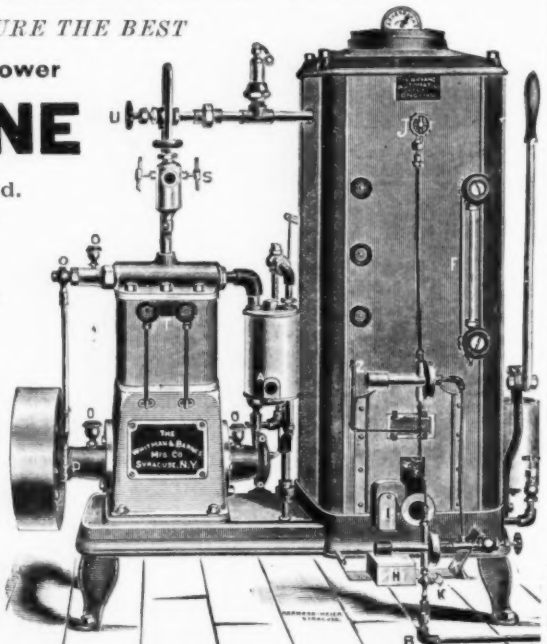
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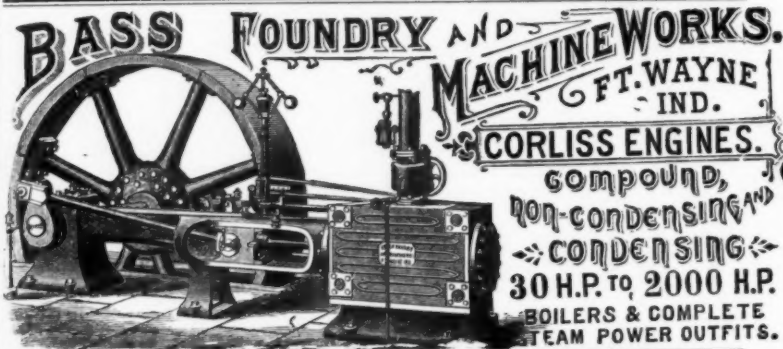
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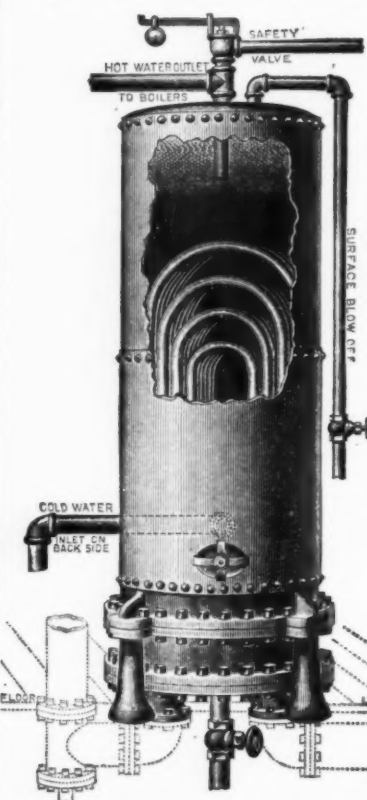
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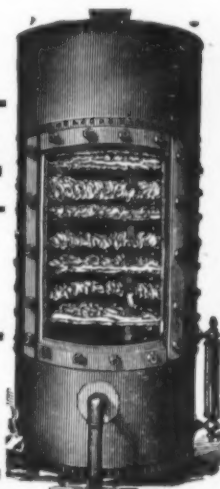
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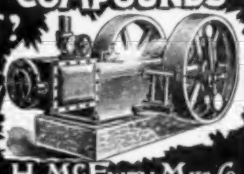
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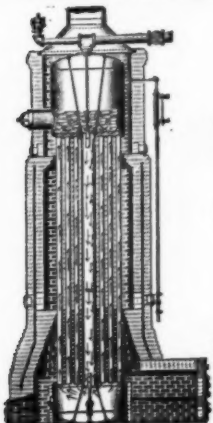
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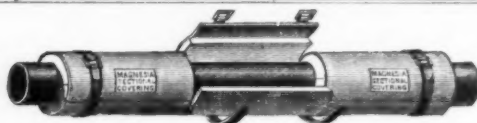
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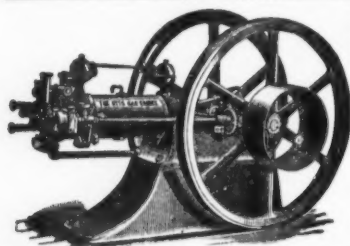
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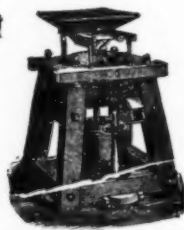
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# MANUFACTURERS' RECORD.

[Name Patented 1883.]

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXII. No. 23.  
WEEKLY.

BALTIMORE, JANUARY 6, 1893.

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## THE SOUTH IN 1892.

### A STATISTICAL REVIEW OF SOUTHERN TRADE AND INDUSTRY.

In preparing our annual statistical review of Southern affairs this year, we have sought to simplify our statistics as much as possible to avoid burdening our readers with a mass of figures that are devoid of value or interest. We have confined our review to such interests as permit of the presentation of definite facts and figures, and we have presented only such statistics as we have been able to gather from authentic sources. We have not engaged in guessing at figures about which no definite knowledge can be had by ourselves or anybody else, nor have we attempted to round up all the miscellaneous census and unofficial statistics that have been floating about during the past year. It is our belief that our readers will better appreciate concise and intelligible figures than pages of undigested and meaningless figures. Neither time, labor nor expense has been spared in our effort to do well what we have undertaken.

### NEW INDUSTRIES IN THE SOUTH.

#### A Decrease in the Number of New Enterprises Established During 1892.

The record of new industrial enterprises established in the South during 1892 shows a total of 2688, as compared with 3241 in 1891, a decrease of 553. The figures for seven years past are as follows:

1886	1,575
1887	3,430
1888	3,018
1889	5,135
1890	3,917
1891	3,241
1892	2,688

The table given below shows the character of the industries and number of each established during 1892 as compared with 1891:

	1892.	1891.
Iron furnaces.....	2	8
Machine shops and foundries.....	82	89
Stove foundries.....	4	8
Miscellaneous iron and steel works.....	48	57
Woodworking establishments.....	630	494
Furniture factories.....	29	50
Carriage and wagon works.....	14	26
Agricultural implement works.....	7	16
Mining and quarrying concerns.....	261	550
Flour mills.....	117	62
Textile mills.....	75	67
Cotton compresses.....	20	23
Cottonseed-oil mills.....	43	31
Brick works.....	81	147
Canning factories.....	57	61
Ice factories.....	68	74
Electric-light and power plants.....	121	165
Gas works.....	5	24
Water works.....	101	108
Miscellaneous enterprises not in above.....	929	1171
Total.....	2688	3241

While the figures for the past year show a considerable falling off from the figures of 1892, this does not indicate a depressed condition in the South, nor can it be taken as evidence of any retrograde movement in Southern industrial interests. On the contrary, there is unusual activity in every line of industrial enterprise in the South at the present time, and every indication points to a degree of activity during the coming year greater than has ever been known before.

The past year has been a period of rigid economy in every line of business in the South, and more attention has been paid to the placing of existing industries upon a firm foundation than to the projection of new industries. This has been essentially the work of the past year. The decrease in new enterprises, moreover, has been less than our figures indicate, for we have followed a more conservative plan in reporting new industries during the past year, including in our records only those of whose genuineness there was no doubt. This course has materially reduced the showing for the past year.

During the past year the groundwork has been laid for much broader accomplishments in the future. The settlement of vexatious political issues, the greater amount

of cash which the present cotton crop is yielding to the producers, the greater abundance of money and more extended credit in the South and the activity and prosperity which mark every branch of industry in that section are the conditions upon which the course of affairs in the South during the year 1893 will depend. With conditions as favorable as these are generally recognized to be there can be no doubt of the very promising prospects which lie before the South at this time. Every condition needful for successful business in the South exists at present, and the year 1892 closes with a very satisfactory record of progress that has been made under trying circumstances and with brilliant prospects for the coming year.

### RAILROAD INTERESTS OF THE SOUTH.

#### New Construction, Important Financial Events, Consolidations, Earnings and other Data.

The South makes a good showing in the matter of railroad construction during 1892, notwithstanding the adverse conditions which have been encountered in the South to a greater extent, possibly, than in any other section. The year has been a bad one for railroad building all over the country, and the new mileage added during the year, small as it is when compared with previous years, is larger than many expected before the figures became known. Under the circumstances the decrease of 10 per cent. in the new mileage of the entire country, as compared with 1891, is not surprising. In the South the notorious financial entanglements of the Richmond Terminal, which controlled a large proportion of the mileage of this section, created a feeling of uncertainty and distrust among capitalists and greatly hampered the promotion of all new railroad enterprises. The after-effects of the financial disturbances of the previous year and the inimical legislation in several States were additional factors in retarding railroad progress.

The railroad construction in the South for five years is given in the following table. We are indebted to the *Railway Age* for the figures for 1892; the others are from Poor's Manual:

#### RAILROAD CONSTRUCTION IN THE SOUTH.

	1888.	1889.	1890.	1891.	1892.
Miles	Miles	Miles	Miles	Miles	Miles
Maryland.....	13	21	46	3	20
Virginia.....	130	289	167	200	23
West Virginia.....	53	53	104	120	203
North Carolina.....	210	315	272	166	56
South Carolina.....	199	48	170	203	33
Georgia.....	439	338	350	294	67
Florida.....	154	139	120	86	146
Alabama.....	383	169	281	162	20
Tennessee.....	201	172	122	224	65
Louisiana.....	42	157	104	153	121
Kentucky.....	393	194	171	41	38
Texas.....	241	295	223	131	211
Arkansas.....	82	97	70	105	44
Mississippi.....	88	158	74	.....	8
Total.....	2555	2448	2280	1818	1053
Total for United States.....	7666	5995	5970	4471	4692

From this it is seen that of the aggregate new construction for five years in the entire country, amounting to 26,964 miles, there were 10,154 miles built in the South, or nearly 38 per cent. The new construction in the South for 1892 is about 25 per cent. of the total.

Indications point to a much greater activity in railroad building during the new year, as the unfavorable conditions have in large measure disappeared and with them the extreme conservatism of capital. Many projects upon which work was suspended because of inability to withstand the financial pressure will be carried forward to completion this year. Extensions and new lines of much promise, for which preliminaries have been arranged, representing a large total mileage, are also likely to be consummated during 1893.

#### IMPORTANT ITEMS OF CONSTRUCTION.

The past year was notable for the completion of some important railroad enterprises, affording additional conveniences and competitive rates to numerous points, opening up new and resourceful territory and giving transportation facilities to sections hitherto unprovided. Quite a number of these lines are of such a character as to exercise a stimulating influence upon the business and the development

of the country traversed. We append a summary of some of the important projects finished during the year:

The Savannah, Americus & Montgomery completed to Montgomery, Ala.

Nashville, Chattanooga & St. Louis built its Tennessee & Coosa branch to Guntersville, Ala., making a direct railway connection from Rome, Ga., to the Tennessee valley. It has also about finished an extension from Huntsville, Ala., to the Tennessee river.

Georgia, Carolina & Northern built a belt line at Atlanta, Ga., enabling the Seaboard Air Line to run into that city.

Ohio & Big Sandy completed a sixteen-mile extension in Kentucky.

Ohio Valley built a ten-mile line from Gracey to Hopkinsville to make connections for a newly leased line.

The Kansas City, Watkins & Gulf completed its line between Lake Charles and Alexandria, La., a distance of ninety-eight miles, giving the latter city a new trunk line.

The New Orleans & Northwestern built from Bastrop to Collins, La.

The Western Maryland completed its Potomac Valley branch, which affords a desirable connecting link between the B. & O. and Reading systems.

The Wilmington & Weldon built a branch from Washington, N. C., to Bethel, N. C., twenty-four miles.

The Charleston, Sumter & Northern built a line from Bennettsville, S. C., to Gibson Station, N. C., which affords the connecting link for the entrance of the Seaboard Air Line into Charleston, S. C., and places that city on almost an air line to Norfolk and the North.

The Morristown & Cumberland Gap completed from Morristown to Corryton, Tenn., forty miles.

Louisville & Nashville completed its Clarksville Mineral branch.

Paducah, Tennessee & Alabama built to Lexington, Tenn., forming a route from Memphis to Paducah, Ky.

Bristol, Elizabethton & North Carolina completed its line between Bristol and Elizabethton, Tenn.

Chicago, Rock Island & Pacific completed its extension from Minco, I. T., to Bowie, Texas, affording a new route to Chicago.

The Austin & Northwestern Railroad built from Fairland to Llano, Texas, giving an outlet to the Llano mineral district.

The Iberia & Vermillion, a road twenty-one miles long, extending from New Iberia to Abbeville, La., and traversing an exceptionally rich agricultural country, was finished and opened for traffic.

The third largest cantilever bridge in the world, and one of the most important enterprises ever planned in the Southwest, was opened to the public on May 12 at Memphis, Tenn. This is the Memphis bridge spanning the Mississippi river at that place, and the only bridge across that stream south of Cairo, Ill.

Baltimore & Ohio widened the gage of the Grafton & Greenbrier.

Richmond, Nicholasville, Irvine & Beattyville opened for operation to Irvine, making the completed mileage sixty-two miles.

Ohio River Railroad of West Virginia opened its new line from Guyandotte to Huntington.

Huntington & Big Sandy completed from Huntington to Kenova, W. Va., and opened for traffic.

Kanawha & Michigan extended to a connection with the Chesapeake & Ohio, giving important facilities to the Kanawha valley coal region.

Missouri, Kansas & Texas completed a branch from Smithville to Lockhart, thirty-six miles, and from Boggy Tank to Sealy, twenty-seven miles.

La Porte, Houston & Northern, La Porte to Houston, twenty-two miles, and North Galveston, Houston & Kansas City, North Galveston to Virginia Point, sixteen miles, nearing completion and will connect, forming a new route from Houston to deep water.

West Virginia & Pittsburg completed to Camden-on-Gauley, W. Va.

Jacksonville, St. Augustine & Indian River built to New Smyrna, Fla.

Louisville, St. Louis & Texas has nearing completion a

short line by which it will secure an independent entrance into Louisville, Ky.

The State Line branch of the Baltimore & Ohio from Uniontown, Pa., to Morgantown, W. Va., practically completed, and is expected to prove a valuable factor in West Virginia mineral development.

The year also saw the completion of one of the most notable achievements in Southern railroad construction—the Ohio extension of the Norfolk & Western.

#### EARNINGS AND EXPENDITURES OF SOUTHERN RAILROADS.

The conditions affecting railroad traffic in the South during the past year have not been conducive to large business or satisfactory earnings. While there has been no great shrinkage in the aggregate volume of business, rates have been unremuneratively low in many instances, and the general demoralization of Southern railroad interests has manifested itself directly in the proceeds of traffic. We have gathered into the following table the gross earnings of thirty-three Southern railroads for eleven months of two years past, and a glance at these figures will show clearly the condition of Southern roads during the past year:

	1891.	1892.	Increase.	Decrease
Ala. Great Southern.....	\$1,584,015	\$1,552,235	.....	\$31,780
Ala. & Vicksburg.....	668,977	527,947	.....	141,030
B. & O. Southern.....	2,266,255	2,418,712	\$152,457	.....
Birmingham & Atlantic.....	46,912	37,379	.....	9,533
Carolina Midland.....	38,684	58,232	.....	19,548
Chas. & C. Chicago.....	147,082	133,666	.....	13,416
Chas. & N. O. & Tex. Pac.....	121,629	135,226	.....	13,597
Chesapeake & Ohio.....	8,897,631	8,747,705	249,926	.....
Ches. Ohio & S. W. N. O. & Tex. Pac.....	2,139,235	2,047,165	.....	92,070
Chas. & N. O. & Tex. Pac.....	3,856,343	3,731,339	.....	125,004
Fla. Southern & Fla. Gulf & Chicago.....	684,707	666,358	.....	18,349
Int. & Great Northern.....	3,699,576	3,677,022	.....	22,554
Kan. City, Ft. Scott & Memphis.....	4,383,882	4,885,239	501,357	.....
Kan. City, Memphis & Birmingham.....	1,091,265	1,019,300	.....	71,965
Louisville & Nash.....	15,456,375	19,823,291	4,366,916	.....
Louis. St. L. & Tex. Memphis & Char'l'n.....	467,966	581,991	114,025	.....
Mo. Kan. & Tex. Sys. Mobile & Ohio.....	1,479,357	1,306,925	.....	172,432
Mo. Kan. & Tex. Sys. Mobile & Ohio.....	8,826,719	8,883,375	56,656	.....
Mobile & Ohio.....	3,198,579	3,069,699	.....	128,880
New Or. & N. East'n.....	1,029,651	1,116,912	87,261	.....
New Or. & South'n.....	154,110	127,521	.....	26,589
Norfolk & Western.....	8,313,609	8,985,923	672,314	.....
Ohio River.....	649,199	719,197	69,998	.....
Vicks., Shr. & Pacific Sanders & Tennessee.....	581,439	476,611	.....	104,828
South Carolina.....	8,103	6,233	.....	1,870
St. Louis & S. West'n Texas & Pacific.....	1,522,379	1,219,911	.....	302,468
Texas & Pacific.....	3,055,215	4,095,359	1,040,144	.....
Tex. Sabine Valley & Northwestern.....	6,390,822	6,142,352	.....	248,470
W. Va. Cen. & Pitts. Wrightsville & Tennessee.....	43,174	45,918	2,744	.....
W. Va. Cen. & Pitts. Wrightsville & Tennessee.....	1,012,918	1,003,312	.....	9,606
W. Va. Cen. & Pitts. Wrightsville & Tennessee.....	78,709	93,489	14,780	.....
Total for 33 roads.....	\$83,925,662	\$87,363,836	\$3,438,174	\$1,642,834

Increase on fourteen roads.....\$3,081,068  
Decrease on nineteen roads.....1,642,834

Net increase.....\$1,438,234

In the table presented below are given the gross earnings and expenditures of leading roads for 1892 and net earnings for 1891 and 1892, years ended June 30 in each case. It will be noted that operating expenses are unusually large in many cases, which is partly explainable by the heavy expenditures for betterments charged by operating account:

#### EARNINGS AND EXPENSES FOR YEAR ENDED JUNE 30.

	Gross earnings 1892.	Expenses 1892.	Net earnings 1892.	Net earnings 1891.
Alabama & Vicksburg.....	\$692,741	\$589,929	\$102,812	\$119,968
Atlantic & North Carolina.....	189,375	109,189	80,186	22,495
Cape Fear & Yadkin Val. Charlotte, Col. & Augusta.....	589,553	353,062	236,491	239,458
Chesapeake & Ohio.....	9,091,899	6,731,731	2,360,168	2,206,693
Ches. Ohio & Southwest.....	2,207,825	1,474,666	733,159	730,428
Chas. & N. O. & Tex. Pac.....	4,337,498	3,199,916	1,137,582	1,351,941
Columbia & Greenville.....	750,709	507,549	243,160	223,984
Fla. Central & Peninsular.....	1,648,655	1,188,667	459,988	279,211
Illinois Central.....	10,291,726	11,070,020	5,221,740	5,129,508
Kan. City, Ft. S. & Memp. Kan. City, Memp. & Birm. Louisville & Nashville.....	4,991,278	3,634,075	1,357,203	1,313,924
Louisville, N. A. & Chi. Louisville, St. L. & Texas.....	21,235,721	15,794,122	7,441,599	7,162,284
Louisville, N. A. & Chi. Louisville, St. L. & Texas.....	3,112,108	2,114,948	997,160	818,617
Louisville, St. L. & Texas.....	666,787	377,016	289,771	178,622
Missouri, Kansas & Texas Mobile & Ohio.....	9,750,536	7,890,592	2,859,944	.....
Mobile & Ohio.....	4,443,790	2,337,497	1,086,293	1,215,712
Nashville, Chatt. & St. L. New Orleans & N. E. ....	5,353,288	3,324,286	2,029,002	1,754,668
Norfolk & Western.....	1,290,626	1,017,183	273,443	264,541
Northeastern Ry. of S. C. Petersburg Railroad.....	9,494,411	6,388,028	3,106,383	2,741,047
Petersburg Railroad.....	649,256	800,411	158,845	474,047
Richmond, F. & Pot. Richmond & Petersburg.....	532,462	296,667	235,795	182,343
Richmond & Petersburg.....	749,529	455,877	293,652	293,890
St. Louis Southwestern.....	368,418	243,359	125,059	70,447
Vicks., Shreveport & Pac. West Va. Central & Pitts. Wilmington & Weldon.....	4,636,461	3,824,291	812,169	.....
Wilmington & Weldon.....	632,801	478,687	154,114	187,264
Wilm. Col. & Augusta.....	930,001	606,223	323,778	.....
Wilm. Col. & Augusta.....	1,452,012	824,169	627,843	680,035
Wrightsville & Tennessee.....	846,286	667,574	178,712	314,012
Wrightsville & Tennessee.....	74,276	44,512	29,764	32,984

\*Deficit, \$525,999.

#### NEW BOND AND STOCK ISSUES.

A number of important financial transactions were carried out during the year by Southern roads. New capital stock and bond issues representing and providing for extensive betterments were effected. Finances were adjusted, new securities at low rates of interest replaced outstanding bonds at higher rates and further privileges and franchises were applied for and obtained. These movements display the confidence of the different com-

panies in the improved outlook for business, and evidence the progressive spirit of Southern railroad management in making provisions for the heavy traffic which this year promises. In the following summary are given some of the important items of this character:

The Baltimore & Ohio sold \$5,000,000 of new common stock, thereby increasing the entire capital stock to nearly \$25,000,000.

Louisville & Nashville sold during its fiscal year \$3,074,000 of new unified 4 per cent. bonds to represent betterments, etc.

Chesapeake & Ohio amended its charter, authorizing the issuance of additional bonds and stocks of the company, and to authorize the company to construct or acquire branches or extensions and to issue its bonds thereon, or to hold stock in and guarantee the bonds of corporations owning such branches or extensions. The stockholders voted authority to the president and board of directors to create a new general mortgage of \$70,000,000 to secure 4½ per cent. bonds, also to issue additional stock of the company.

San Antonio & Aransas Pass filed resolutions providing for a new mortgage for \$21,600,000.

Georgia Midland & Gulf perfected arrangements to fund its 6 per cent. bonds by a new issue of 4 per cent.

International & Great Northern executed a mortgage for \$3,000,000.

Illinois Central sold during its fiscal year \$7,840,089 of bonds and stocks. It also increased capital stock from \$45,000,000 to \$50,000,000, and executed a mortgage authorizing the issuance of \$25,000,000 of 4 per cent. bonds.

Louisville, St. Louis & Texas executed a mortgage for \$5,000,000 to refund its bonded indebtedness.

Missouri, Kansas & Texas secured a special act from Texas legislature terminating all differences between the reorganization committee and the State authorities, and authorizing the company to build 500 additional miles of road within that State. Authority was also given to issue bonds upon the new mileage at the rate of \$20,000 per mile and stock at \$10,000 per mile.

Norfolk & Western stockholders indorsed recommendation of directors to increase preferred stock from \$40,000,000 to \$50,000,000 to provide means for the many improvements, further equipment and completion of Ohio extension.

Owensboro, Falls of Rough & Green River Railroad authorized an issue of \$6,000,000 of bonds to build to Middleborough, Ky.

Florida Central & Peninsular authorized an issue of consolidated fifty-year 5 per cent. bonds to cover the entire property at a rate not to exceed \$5000 per mile. This will provide funds for the Savannah extension.

Southern Pacific filed its amended articles of incorporation in San Francisco in November. The capital stock is \$90,000,000. The certificate gives details of thirty-six roads and branches included in the consolidation, with aggregate length of 3000 miles.

Tennessee Midland authorized cancellation of all outstanding mortgage bonds and a new issue of 5 per cent. firsts at the rate of \$11,000 per mile, and 5 per cent. seconds at \$9000 per mile.

Norfolk, Wilmington & Charleston authorized an issue of bonds at the rate of \$16,000 per mile and not to exceed in amount \$10,000,000.

#### CONSOLIDATIONS, PURCHASES, LEASES.

The prevailing tendency towards railroad consolidation, which has been so strikingly manifested during the past year among some of the Northern systems, has also shown itself in a measure in the South in the merging of a number of the smaller lines in the larger systems, the result of which cannot fail to be beneficial to the transportation and business of the South. In the following paragraphs we briefly summarize some of the leases, consolidations, sales, etc., which have taken place during the past year:

The St. Louis, Iron Mountain & Southern absorbed the Camden & Alexandria.

Florida Central & Peninsular leased the South Bound, Ohio Valley Railroad leased the Clarksville & Princeton branch of Louisville & Nashville.

Owensboro, Falls of Rough & Green River is to shortly pass into the control of the Huntington system.

Illinois Central absorbed the Louisville, New Orleans & Texas.

White Oaks Railroad purchased by Texas & Pacific.

Norfolk & Western leased the Lynchburg & Durham and the Roanoke & Southern.

The Albany, Florida & Northern was leased by the Savannah, Americus & Montgomery.

Silver Springs, Ocala & Gulf is understood to have been leased by the Plant system.

Tennessee Midland was purchased by Paducah, Tennessee & Alabama.

The Chesapeake & Ohio acquired during its fiscal year

the Elizabethtown, Lexington & Big Sandy, Ohio & Big Sandy and Kentucky & South Atlantic roads.

An agreement was reached for the transfer of the control of the San Antonio & Aransas Pass to the Southern Pacific.

#### RECEIVERSHIPS OF SOUTHERN RAILROADS.

The year 1892 has been a memorable period for railroad receiverships. Top-heavy concerns, like the Richmond Terminal, after weathering financial disturbances of previous years, were collapsed by the stringencies of the past year. Other railroad companies of more legitimate standing were forced to the wall by decreased earnings and inability to meet interest charges. Some new roads with but limited backing found it impossible to tide over the heavy expenditures incident to new lines. Legislation in some States was also a telling factor in increasing the financial burdens of the roads. The list we give below shows twenty-two companies for which receivers were appointed at some time during the year. For these the mileage and securities are given. In addition to these there are the Western Florida, thirty-three and a-half miles of road, Abbeville & Way Cross, thirteen miles, and Morristown & Cumberland Gap, forty miles. The list follows:

#### RAILROAD RECEIVERSHIPS CREATED IN 1892.

Name.	Mileage.	Bonds.	Stocks.
Augusta, Gibson & Sandersville.....	80	\$400,000	\$123,528
Atlanta & Florida.....	165	840,000	1,115,000
Blue Ridge & Atlantic.....	21	300,000	400,000
Bristol, Elizabeth & N. Carol'a.....	24	600,000	1,500,000
Central Railroad & Banking Co. Chattanooga Southern.....	1880	21,479,000	7,500,000
Chattanooga Southern.....	86	1,440,000	1,440,000
Charleston, Sumter & Northern.....	139	2,082,000	1,328,000
Chattanooga Union.....	41	600,000	1,000,000
E. Tenn., Virginia & Georgia.....	2,576	39,960,000	\$7,000,000
Florida Southern.....	307	2,994,400	2,595,400
Gulf & Ship Island.....	20	400,000	400,000
Hartwell Railroad of Georgia.....	10	20,000	21,000
Jacksonville, Tampa & Key West.....	200	7,000,000	3,010,000
Knosville, Cumb. Gap & Louisville.....	82	2,955,000	2,150,000
Louisville Southern.....	130	4,190,000	3,500,000
Macon & Northern.....	105	2,200,000	1,000,000
Memphis & Charleston.....	339	5,524,000	5,312,728
Mobile & Girard.....	135	1,080,000	1,299,707
Mobile & Birmingham.....	147	3,000,000	3,000,000
Richmond & Danville.....	3,520	14,190,750	5,000,000
Richmond Terminal.....	.....	16,865,000	75,000,000
Savannah, Americus & Montgomery.....	395	2,940,000	1,114,399
Total.....	10,243	\$131,416,160	\$174,779,687

#### REORGANIZATIONS.

A record of the railroad companies operating in the South and Southwest and for which some steps towards reorganization were taken during the year is also presented. It includes twenty-eight companies, several of which, at this time, are fully reorganized and efforts towards that end are satisfactorily progressing for many of the others. In this list we give details of mileage and securities for twenty-four. The mileage of the others are: Decatur, Chesapeake & New Orleans, thirty-four miles; Morristown & Cumberland Gap, forty; East Line & Red River, 153, and Nashville, Tellico & Charleston, twenty-five. The list follows:

Name.	Mileage.	Bonds.	Stocks.
Atlanta & Florida.....	165	\$840,000	\$1,115,000
Baltimore & Eastern Shore.....	87	1,450,000	500,000
Bristol, Elizabeth & N. Carol'a.....	24	600,000	1,500,000
Central Railroad & Banking Co. Char'l'n, Cincinnati & Chicago.....	1880	21,479,000	7,500,000
Chattanooga Southern.....	213	7,345,000	7,345,000
Chattanooga Southern.....	86	1,440,000	1,440,000
Chesapeake & Nashville.....	38	775,000	1,000,000
Choctaw Coal & Railway.....	97.5	2,850,000	3,750,000
Empire & Dublin.....	32	120,000	320,000
Florida Southern.....	307.5	2,994,400	2,595,400
Georgia Southern & Florida.....	285	3,420,000	.....
Houston, East & West Texas.....	192	2,094,000	1,800,000
Houston & Texas Central.....	153	16,867,000	10,000,000
International & Great Northern.....	845	18,233,000	9,755,000
Jacksonville & Atlantic.....	17	50,000	.....
Macon & Northern.....	114.5	20,000	.....
Marietta & North Georgia.....	244	1,784,000	3,380,628
Mobile & Birmingham.....	147	3,000,000	3,000,000
Orange Belt of Florida.....	153	700,000	850,000
Rich., Nich., Irvine & Beatty's v'e Richmond Terminal.....	61	1,205,000	2,425,000
Richmond Terminal.....	.....	16,865,000	75,000,000
San Antonio & Aransas Pass.....	688.5	11,948,000	5,000,000
South Carolina Railway.....	335	8,820,092	4,204,160
Texas Central.....	239	3,399,000	205,265
Total.....	6599	\$128,007,492	\$139,164,450

It will be observed that movements are already under way to rehabilitate a large proportion of the companies placed in the hands of receivers during 1892.

#### BANKING INTERESTS OF THE SOUTH.

A substantial Gain in Capital and an Increase in Business.

In estimating the progress of the national banking system in the South there must be recognized certain influences of late years operating throughout the country whose tendency has been to discourage the organization to any great extent of such institutions. Perhaps the chief and most important of these is the policy of the government of gradually retiring the bonds upon which and upon which alone can national bank circulation be based. The decrease in these securities outstanding less-



sensory the available material upon which to institute such banks, served to check the fullest development of the opportunities for growth. Apart from this there existed during the past two years, which are notable for the large falling off in the establishment of new national banks, conditions far-reaching in effect and accountable in a measure for this decrease. The years 1891 and 1892 were characterized by financial stringencies penetrating and affecting to a greater or less degree every field of enterprise. A more conservative feeling prevailed amongst investors, and new enterprises were hampered in efforts to secure capital by the slow and cautious movements of capitalists.

The year 1890 shows the organization of 307 new national banks in the country with an aggregate capital of \$36,250,000. Of these the South furnished 105, with \$10,985,000 capital. The two years following evidence a decrease of more than 45 per cent. in the number of new banks and over 57 per cent. in aggregate capital.

In 1891 the total for the country was 193 new banks, with \$20,700,000 capital, and the number for the South was fifty-five, with \$5,310,000 capital. The showing for 1892 is 163 banks, with aggregate capital of \$45,285,000. Of these 163 banks thirty-seven were organized in the South, with an aggregate capital of \$2,780,000. Texas leads the country in the number of new banks, twenty-two having been established in that State, with \$1,445,000 capital. The following table gives the figures for the South for 1891 and 1892 by States:

	1891.		1892.	
	No. of Banks.	Capital.	No. of Banks.	Capital.
Maryland.....	6	\$1,150,000	1	\$50,000
District of Columbia.....	1	200,000	..	..
Virginia.....	5	400,000	1	200,000
West Virginia.....	3	255,000	5	350,000
Kentucky.....	6	415,000	1	100,000
Tennessee.....	3	150,000	3	150,000
North Carolina.....	3	450,000	1	125,000
Georgia.....	2	300,000	1	150,000
Florida.....	4	200,000	1	100,000
Alabama.....	1	50,000	1	100,000
Mississippi.....	1	50,000	..	..
Louisiana.....	2	100,000	..	..
Texas.....	17	1,445,000	22	1,445,000
Arkansas.....	1	50,000	..	..
Total.....	55	\$5,310,000	37	\$2,780,000

The above figures are for the twelve months ending October 31 in each year, and covered by the comptroller's report. We have record of thirty-six banks authorized to commence business in the South during the calendar year 1892 with aggregate capital of \$2,680,000. The names, locations and capital of these are as follows:

ALABAMA.		
Farmers and Merchants' Nat'l Bank.....	Huntsville.....	\$100,000
FLORIDA.		
First National Bank.....	Key West.....	100,000
Putnam National Bank.....	Palatka.....	50,000
GEORGIA.		
Fourth National Bank.....	Columbus.....	150,000
KENTUCKY.		
Newport National Bank.....	Newport.....	100,000
First National Bank.....	Glasgow.....	50,000
MARYLAND.		
Canton National Bank.....	Canton.....	50,000
NORTH CAROLINA.		
Atlantic National Bank.....	Wilmington.....	125,000
TENNESSEE.		
Citizens' National Bank.....	Pulaski.....	50,000
First National Bank.....	Jonesboro.....	50,000
TEXAS.		
Amarillo National Bank.....	Amarillo.....	50,000
City National Bank.....	Bowie.....	50,000
First National Bank.....	Blooming Grove.....	50,000
National Bank of Dainierfield.....	Dainierfield.....	50,000
Mercantile National Bank.....	Dallas.....	150,000
Denton National Bank.....	Denton.....	50,000
First National Bank.....	Detroit.....	50,000
Coleman National Bank.....	Coleman.....	50,000
First National Bank.....	Crockett.....	50,000
City National Bank.....	Gatesville.....	50,000
First National Bank.....	Goldthwaite.....	50,000
Brownwood National Bank.....	Brownwood.....	50,000
State National Bank.....	Jefferson.....	50,000
First National Bank.....	Marlin.....	100,000
First National Bank.....	Mt. Pleasant.....	50,000
Pilot Point National Bank.....	Pilot Point.....	50,000
Fifth National Bank.....	San Antonio.....	125,000
Farmers and Merchants' Nat'l Bank.....	Rockwall.....	50,000
Tyler National Bank.....	Tyler.....	100,000
First National Bank.....	Whitewright.....	50,000
VIRGINIA.		
City National Bank.....	Norfolk.....	200,000
WEST VIRGINIA.		
First National Bank.....	Ceredo.....	50,000
Kanawha National Bank.....	Charleston.....	100,000
Traders' National Bank.....	Buckhannon.....	50,000
Elkins National Bank.....	Elkins.....	50,000
Citizens' National Bank.....	Martinsburg.....	100,000
Total for thirty-six banks.....		\$2,680,000

During the comptroller's year there were seventeen banks placed in the hands of receivers with an aggregate capital of \$2,450,000, as compared with twenty-five in 1891 with \$3,662,000 capital. Of these in 1892 only three were in the South, with capital aggregating \$425,000, against six in 1891 with \$875,000, a gratifying decrease of 50 per cent. In 1891 the South furnished about 25 per cent. of the national bank failures of the country and in 1892 about 17 per cent. The three Southern banks placed in the hands of receivers in the past year are: The First National Bank, Wilmington, N. C., capital \$250,000;

Bell County National Bank, Temple, Texas, capital \$50,000, and First National Bank, Rockwall, Texas, capital \$125,000. During the year fifty-three banks went into voluntary liquidation with an aggregate capital of \$8,607,500. Eleven of these were in the South, with capital amounting to \$1,260,000. They were distributed as follows: Texas four, with \$210,000 capital; Tennessee two, \$350,000; Alabama two, \$500,000; Georgia one, \$50,000; Florida one, \$50,000, and Virginia one, \$100,000.

The volume of business transacted by Southern clearing-houses for the fifty-one weeks from January 1 to December 24 of 1892 evidences a net gain over the same period of 1891 of \$71,116,672. Baltimore, Louisville, Washington, Houston and Richmond are the leaders in this splendid showing. The comparative figures are as follows:

SOUTHERN BANK CLEARINGS JANUARY 1 TO DECEMBER 24—51 WEEKS.

	1891.	1892.	
Baltimore.....	\$726,651,673	\$768,885,792	inc. \$42,234,119
Washington.....	87,600,259	101,718,664	inc. 14,118,405
New Orleans.....	508,124,461	509,032,309	dec. 907,848
Louisville.....	355,047,280	388,659,398	inc. 33,612,118
Memphis.....	126,850,438	131,948,028	inc. 5,097,590
Richmond.....	118,642,318	126,847,412	inc. 8,205,094
Galveston.....	158,571,746	137,399,447	dec. 21,172,299
Houston.....	101,386,478	111,382,469	inc. 9,995,991
Nashville.....	163,466,495	95,119,776	dec. 68,346,719
Dallas.....	45,881,616	49,926,150	inc. 4,044,534
Norfolk.....	53,753,525	49,789,350	dec. 3,964,175
Fort Worth.....	31,933,815	29,227,537	dec. 2,706,278
Birmingham.....	30,657,288	27,203,340	dec. 3,453,948
Waco.....	37,193,759	30,403,823	dec. 6,789,936
Chattanooga.....	24,957,429	27,228,016	dec. 2,270,587
Total.....	\$2,512,058,540	\$2,583,203,212	inc. \$71,116,672

### THE SOUTH'S FOREIGN COMMERCE.

Many New Steamship Lines Promise a Large Increase in Imports and Exports.

The foreign trade of the South during the year 1892 has developed many important features and has been marked by a decidedly progressive movement in the direction of establishing more intimate direct relations between Southern ports and foreign countries. This movement has been most marked at the South Atlantic ports, notably at Savannah, and the credit for what has been done and for what is likely to result from negotiations now in progress belongs to one of Atlanta's most progressive citizens, Col. I. W. Avery. Colonel Avery started last spring to work up interest in the question of direct trade and to induce the establishment of additional lines of steamships plying between Southern ports and foreign points. Starting simply as a private citizen with no object in view beyond benefit to Southern commerce, the movement which he inaugurated has gained powerful headway and has enlisted the interest of many capitalists, business men, railroad companies and bankers, and the outcome of this movement, which was so modestly started, promises to be the establishment of a number of very important steamship lines, which will bring direct to Southern ports the goods that are needed from foreign countries, and at the same time offer a direct and immediate outlet for Southern products.

As a matter of fact, several of these lines are already in operation. The Murrell Line of steamers, plying from Brunswick to Liverpool and Bremen, dispatched its first vessel a few months ago. The steamship Genoa, of the Prince Line, loaded at Savannah last month for Mediterranean and Adriatic ports and commenced a regular service. Direct service has also been established by those interested in this same line between Charleston and Mediterranean ports. A new fruit line has been established between Savannah and South America, and a regular service has been instituted between Fernandina, Fla., and London for carrying Florida fruits. The Louisville & Nashville Railroad has started a line to run from Pensacola, Fla., to Havana, Cuba, the first vessel having sailed last month. A line has been arranged to run from Wilmington, N. C., to Europe. French capitalists are considering the establishment of a line between New Orleans and Mediterranean ports. English capitalists, represented by Mr. Ernest Bigland, of London, are negotiating for a line to run from Port Royal, S. C., to England, and a large and very comprehensive plan, which is now being discussed by English capitalists and those interested in Southern transportation interests, provides for the establishment of a first-class line between either Brunswick or Savannah and English ports, with ample banking capital at this end to facilitate trade. One of the most important moves in the extension of the foreign commerce of the South is the new Chesapeake & Ohio Steamship Co., which will begin regular service between Newport News, Va., and Liverpool as soon as six new steamers, now being constructed for this service, can be built. Substantial progress has been made in the development of coal export trade for New Orleans and Mobile, and this year will probably see a large business established in this line.

Notwithstanding the adverse conditions under which

business has been conducted in the South during the past year, the foreign trade of the South shows only a small decrease, which under the circumstances is very significant. The value of cotton exported during eleven months of 1892 was \$44,644,569 less than for the same period in 1891. From the beginning of the present crop year, September 1, 1892, there has been a shrinkage in cotton exports from Southern ports of about 400,000 bales as compared with the same months of 1891, representing a loss of not less than \$15,000,000, but the increase in exports of other products has been so large that the net loss in Southern exports for eleven months of 1892 has been reduced to \$9,183,195.

The grain trade of the Southern ports has been an important factor in counteracting the decline in cotton shipments. This is strikingly shown at New Orleans, where the loss in cotton has been heaviest, in spite of which the exports from that city show a small gain. During the year ended September, 1890, the wheat exports from New Orleans amounted to only 1,739,588 bushels, in 1891 the shipments were 5,150,382, and for the year ended September 1, 1892, the exports of wheat reached 15,201,854 bushels.

The foreign trade of the South for eleven months of 1892 is shown by the following table:

FOREIGN TRADE OF THE SOUTH FOR ELEVEN MONTHS ENDED NOVEMBER 30.

	1891.		1892.	
Customs Districts.	Imports.	Exports.	Imports.	Exports.
Baltimore, Md.....	\$17,294,673	\$29,532,447	\$12,869,371	\$83,666,497
Beaufort, S. C.....	41,504	913,132	80,151	742,425
Brazos, Texas.....	413,657	587,696	129,209	364,159
Brunswick, Ga.....	4,734	5,010,662	11,380	4,633,281
Charleston, S. C.....	1,681,620	187,14,948	322,971	10,385,626
Corpus Christi, Tex.....	2,423,895	3,865,120	2,820,162	5,129,883
Fernandina, Fla.....	790,997	790,997	..	1,393,248
Galveston, Texas.....	671,806	29,547,753	841,666	7,442,497
Georgetown, D. C.....	296,158	..	165,226	3,544
Key West, Fla.....	723,671	418,838	870,835	1,677,765
Louisville, Ky.....	539,485	..	331,414	..
Mobile, Ala.....	62,790	2,137,548	255,785	2,357,183
New Orleans, La.....	19,696,338	96,403,113	26,704,233	96,871,259
Newport News, Va.....	116,273	12,162,598	120,638	10,527,533
Port & Pines, Va.....	38,717	12,552,399	35,886	7,446,299
Paso del Norte, Tex.....	8,899,765	13,769	5,137,282	..
Pearl River, Miss.....	4,523	935,273	210	1,059,244
Pensacola, Fla.....	117,399	2,056,550	26,759	3,370,714
Richmond, Va.....	26,200	6,231,177	55,610	2,608,660
Saluda, Texas.....	893,573	2,952,676	1,352,259	2,719,217
Savannah, Ga.....	395,839	24,700,838	223,012	18,493,826
Tampa, Fla.....	392,627	235,276	466,110	410,143
Texier, La.....	2,862,131	731	..	1,581
Wilmington, N. C.....	476,313	5,734,514	116,664	5,353,182
Total.....	\$31,499,319	\$95,997,510	\$46,873,914	\$26,864,306

### THE COTTON CROPS.

The Season of 1892-93 Shows a Great Decline from the Enormous Production of 1891-92.

The cotton crop grown during the season of 1891-92 was the largest ever produced, amounting to 9,935,379 bales as compared with 8,652,597 bales for the preceding season. The oversupply produced by this enormous crop, together with the surplus left over from the previous season, depressed the average price received for the crop of 1891-92 to 7.5 cents, the lowest figure reached since the season of 1844-45. This overproduction and the abnormally low price resulted in a large reduction of acreage when the crop of the present season was planted, this reduction ranging from 10 to 18 per cent. Unfavorable crop conditions have reduced the yield during this season, and the reduced acreage and smaller yield combined have in many sections caused a falling off of 40 to 50 per cent. from the average crop, according to the reports by the Department of Agriculture. In nearly every cotton-growing section there has been a large reduction in the cotton crop during this season, and the estimates of the crop now coming in range from less than 6,000,000 bales up to about 7,000,000 bales, the best authorities pointing to a crop of between 6,250,000 and 6,500,000 bales. The large table accompanying this article gives the principal statistics of the cotton crops for six years past, and the table given below shows the estimated acreage during 1891-92 and the present season, calculated from the percentages reported by the Department of Agriculture.

ESTIMATED ACREAGE OF COTTON.

	1891-92.	1892-93.
	Acres.	Acres.
Alabama.....	2,704,326	2,271,634
Arkansas.....	1,616,262	1,325,335
Florida.....	231,849	187,798
Georgia.....	3,211,815	2,723,124
Louisiana.....	1,359,647	927,238
Mississippi.....	2,703,141	2,374,170
North Carolina.....	1,099,944	836,068
South Carolina.....	1,995,389	1,650,927
Tennessee.....	707,918	597,572
Texas.....	4,335,862	3,685,483
Sundry.....	67,734	67,696
Total.....	19,948,287	16,636,985

The season of 1891-92 was a memorable one for the

cotton planter. Not only did the crop exceed any ever before grown, but the price fell lower than at any period since 1844-45. In the season of 1889-90 the crop was 7,307,281 bales, the greatest ever grown to that date. In the following year, 1890-91, this was exceeded with a crop of 8,652,597 bales, and last season was greater yet—9,035,379 bales. Fortunately for the planter it was not generally supposed, up to November, 1891, that the crop could exceed 8,000,000 bales, and prices were fairly maintained, but it then became apparent to buyers that the quantity of the staple would be greater than their needs, and prices declined in consequence. In December, 1891, *Bradstreet's*

following week opened with prices at 8 cents, but Latham, Alexander & Co.'s estimate of 7,750,000 bales corrected to a maximum of 7,250,000, together with discouraging crop reports from various authoritative sources, caused active trading, and prices advanced to 8½¢. On the 22d there was a short advance to 8¾¢, but during the following week the market dropped 1-16 and held at 8 5-16, with a quiet tone. This was owing largely to the fact that the foreign market was doing little buying. On November 1 the statement showing 1,458,139 bales received during the month as against 2,030,643 the preceding year and 1,743,287 the year before, making

the low price received for cotton in the preceding season, preventing planters from obtaining the usual advances of money. In Georgia the acreage was decreased for the same reason, and in that State, Tennessee and Louisiana the report showed that planting had been seriously delayed by excessive rains and a late season. In June the reports as to acreage made a better showing, the reduction being 16.5 per cent., but the average condition was poor. Texas and Alabama reported cut-worms as damaging the crop, and from Arkansas, Tennessee and Mississippi came word of great damage from the late season, rain and flood. In August the department report showed a further reduction in condition of the crop for July and the month named. South Carolina reported wet weather as injuring the crop and preventing good fruiting; Georgia, the condition lower than for several years; Florida, wet weather making the cotton run to weed; Alabama, cotton supply going to weed and not fruiting well; Mississippi, damaged by excessive rains; Louisiana, behind fully three weeks, far below the average, and heavy rains prevented it from fruiting; Arkansas, condition far below the average and running to weed; estimate about half a crop; Texas, cotton needs rain badly, but if it comes a generous crop is assured. The September report was even more discouraging, the average condition being lower than at any time since 1883, when the crop was 5,713,000 bales. In Texas and Arkansas, particularly the former, the drouth had caused great damage, though the crop was expected to be fair, while east of the Mississippi river the conditions were the reverse, heavy rains having caused the crop to run to stalk, causing rotting and premature ripening of the bolls. The boll-worm appeared in Florida, Alabama and to a less extent in Mississippi and Louisiana. For October the report was still worse, the average condition having fallen off 3½ points from the preceding month. Texas still held up well, and there was an improvement in Georgia, but from other States excessive moisture and other unfavorable conditions had caused unusual damage. The November report emphasized the probability of an unusually light crop. Along the Atlantic coast the effect of a cold wet spring, followed by long-continued dry weather, was to produce a large weed, deficient in fruit. In Alabama the yield was unusually light, in some places hardly above twenty-five pounds lint cotton to the acre. In the Mississippi valley there was a good growth of stalk, but small development of bolls.

The general causes which have led to the smallness of the crop this season may be summed up as follows: Decreased acreage, late and wet spring, followed by both drouth and damaging rains, and insect ravages, largely occasioned by the weather conditions. The department averages in October were 73.3 per cent., which would indicate a crop of 6,622,000 bales, but the November returns, while not giving any percentage, clearly indicates that the conditions were even more unfavorable, and points to one of the smallest cotton crops known in this country for years.

#### COTTON MANUFACTURING IN THE SOUTH.

##### Growth of the Industry During 1892, New Mills Completed and Now Building.

The past year has been one of unusual activity and prosperity for the cotton manufacturing industry of the South. The extreme low price of cotton has been of great advantage to spinners, and the mills of the South have profited greatly by the cheap raw material which they have had during the past year. Mills have been running actively throughout the year and have earned good profits as a rule. In fact, the past year has been probably the most prosperous period through which this industry has ever passed. A great many new mills have been built and put in operation in the South during the past year, and a large number of others are under construction and will be completed and put in operation during the present year. The following table shows the increasing consumption of cotton by the Southern mills, the figures being taken from the annual reports of Henry G. Hester, secretary of the New Orleans Cotton Exchange:

COTTON CONSUMED BY SOUTHERN MILLS.  
(Years ended August 31.)

States.	1890. Bales.	1891. Bales.	1892. Bales.
Alabama.....	35,772	39,145	42,265
Arkansas.....	453	610	1,622
Georgia.....	146,385	153,818	168,366
Kentucky.....	13,509	14,536	15,905
Louisiana.....	14,066	13,660	15,322
Mississippi.....	16,069	15,162	15,514
North Carolina.....	119,595	146,508	165,011
South Carolina.....	144,055	164,957	186,099
Tennessee.....	34,508	30,528	33,808
Texas.....	3,614	6,522	11,907
Virginia.....	17,224	23,707	26,538
Total.....	515,250	603,133	682,297

The present extent of the cotton manufacturing industry

#### AMERICAN COTTON CROP FOR SIX YEARS. (Year Ending Close of August.)

	1891-92.	1890-91.	1889-90.	1888-89.	1887-88.	1886-87.
Port receipts.....	7,137,969	6,976,396	5,857,174	5,550,345	5,612,448	5,397,634
Overland to mills.....	1,253,566	1,106,675	937,471	939,700	1,001,264	826,369
Southern consumption.....	656,086	664,664	546,894	479,784	456,090	401,452
Less taken by Southern mills from ports.....	9,077,510	8,691,926	7,341,539	6,968,826	7,069,799	6,529,355
Total crops.....	9,635,379	8,652,597	7,311,322	6,938,290	7,945,833	6,505,487
EXPORTS.						
Great Britain.....	3,315,202	3,339,132	2,856,192	2,817,706	2,814,126	2,696,594
France.....	691,134	559,999	472,737	414,719	406,179	474,791
Continent and Channel (including Mexico).....	1,809,541	1,990,201	1,877,601	1,506,242	1,407,197	1,260,593
Canada overland.....	76,560	68,399	55,491	52,011	51,016	35,453
Total exports.....	5,933,437	5,847,191	4,955,931	4,796,678	4,681,518	4,472,731
Stocks at close of year.....	419,221	227,624	61,396	56,416	180,662	86,399
Northern mills takings.....	2,196,766	2,027,362	1,799,258	1,785,979	1,804,993	1,710,086

issued an estimate of 8,490,000 bales, which was severely criticised as being excessive and favoring the bear side of the market. After the early part of December the price steadily declined until March, when it reached its lowest point, 6.28 cents. From then until the opening of the present season, in September, it gained very little and was barely steady.

The extent of this drop may be seen in the following table of market quotations of spot cotton in New York:

Month.	Highest.	Lowest.
September, 1891.....	8.77	8.60
October, ".....	8.60	7.92
November, ".....	8.20	7.59
December, ".....	7.50	7.30
January, 1892.....	7.50	6.99
February, ".....	7.13	6.61
March, ".....	6.67	6.28
April, ".....	7.13	6.41
May, ".....	7.31	7.04
June, ".....	7.80	7.16
July, ".....	7.43	6.95
August, ".....	7.49	6.93

Average price for the year, 7.50 cents.

This difference in price is even more striking in the futures. Cotton sold in September, 1891, for delivery in January, 1892, was quoted at 9.30 to 8.59, and the price during the latter month was 7.50 to 6.99. During the same month, September, March delivery was quoted at 9.65 to 8.85 and July delivery at 10 to 9.24. Indeed, on the basis of September quotations, the average price for the year would have been about 9.46 cents as against 7.50 actually received. In 1889-90 the crop of 7,307,281 bales brought an average of 11.53 cents; in 1890-91 a crop of 8,652,597 bales averaged 9.03 cents.

The acreage planted in cotton, as estimated from the reports of the Department of Agriculture, was 20,100,022 acres in 1889-90, 20,483,326 in 1890-91, 19,918,287 in 1891-92 and 16,636,985 for the present season of 1892-93. On this basis the yield was .36, .41 and .45 bales per acre, respectively, for the first three seasons. For the present season the crop estimates, which in September varied from 7,000,000 to 8,000,000 bales, have been reduced, as continued reports of a low yield and evidence of it in the reduced receipts at ports have come in. Atwood Violet & Co., of New Orleans, now estimate the crop at 6,250,000 bales; Mr. Neill, of the same city, estimates it at 6,500,000, including 250,000 bales left over from last season, and *Bradstreet's*, through nearly 2000 correspondents in the cotton States, estimates it at 6,460,000 bales.

At the beginning of the present season buyers were skeptical both as to reports of short crops, the effect of the weather upon the staple and the reduced acreage reported by the Department of Agriculture; consequently prices changed but little from those of August until toward the end of the month, when 7½ cents was reached. During the first week in October, owing to confirmatory reports from many sources as to the probable reduction in the crop and the smaller amount brought into sight during September—531,619 bales, as against 823,317 in 1891-92 and 856,438 of 1890-91—prices advanced to 7 11-16 at the beginning of the week and to 8 1-16 at its end. At this time buyers displayed some anxiety as to the outlook, which was emphasized by reports of frost in parts of the cotton belt. This led to buying, and prices advanced to 8 3-16 in the first of the week, dropping to 8 before the end, owing to the Department of Agriculture report showing better average condition than was expected. The

total receipts to November 1, 1,959,758 bales against 2,862,960 in 1891-92, had little effect on prices, though toward the end of the week they advanced 1-16 with a stronger and steadier tone, and on the 5th gained further, to 8 7-16, owing to further reports of low yield and some anxiety displayed by domestic spinners to secure themselves in event of as short a crop as anticipated. During the week ending November 12 this movement became stronger and prices advanced daily, reaching 9 cents on the 11th with unusually heavy buying. This continued during the following week, notwithstanding the fact that foreign markets purchased very lightly, and by the 19th the price had advanced to 9 7-16 cents. On the 21st, Monday, this price ruled with an irregular and feverish market caused by depressing crop reports, and on Tuesday advanced to 9½¢, with a further advance Wednesday to 9 11-16. Thursday was a holiday, and on Friday buyers went wild, all kinds of gloomy crop reports were credited and the price went up to 10 cents, with the greatest volume of trading in futures ever recorded in one day on the New York Cotton Exchange, viz., 556,900 bales. On Saturday and Monday the same price ruled, with a steadier market, inclining to be dull on the latter day. During the remainder of the week prices declined a little, reaching 9½¢ on Saturday, December 3. This was owing to a large number of selling orders early in the week and no corresponding increase in the demand. On December 1 the cotton brought in sight for the past month was 1,478,269 bales, against 1,910,272 in 1891-92 and 1,618,617 in 1890-91, the total in sight to that date being 3,468,027 bales, against 4,782,232 the preceding year and 4,218,342 the year before. During the week from December 5 to 10 the market was irregular, partly through fear of adverse legislation from the anti-option bill. On Saturday it closed at 9½¢ with a barely easy tone. During the next week the same feeling prevailed, but toward the latter part strong advices from the South showing conclusively that the crop would be very short, combined with more activity among foreign buyers, advanced prices again, reaching 10 cents on the 17th (Saturday). On Monday following 9½¢ cents ruled, the drop being due to large sales of local holders. This price prevailed throughout the week, with a fairly steady market and increased buyings from spinners, influenced doubtless by *Bradstreet's* and other reports definitely confirming the shortness of the crop.

The unanimity of opinion among the various authorities indicates clearly that the crop of 1892-93 will not exceed 7,000,000 bales, and will probably fall short of 6,500,000. One noticeable feature throughout the present season thus far is the unusually slow movement of foreign buyers. While the Liverpool market has fluctuated violently at times, buyers have not done anything near so much trading as usual. The Manchester cotton lockout no doubt is partly the cause of this, but it is only a matter of short time before this will be over and purchases must be made. When Liverpool comes into our market to stock its own there is a probability of a considerable advance in price, and it is the opinion of many persons well informed on the subject that prices ranging near those of 1888-89 and 1889-90 will be secured and maintained for the present crop.

In May, 1892, the report of the Department of Agriculture stated an average decrease in acreage of 18.6 per cent. In South Carolina the reduction was largely due to



of the South is shown by the table given below, the data for which we have obtained direct from the manufacturers and have revised up to date. In connection with our own figures we also give the number of looms and spindles as reported by the New Orleans Cotton Exchange on September 1, 1891, the comparison between the two showing the increase in the last sixteen months:

LOOMS AND SPINDLES IN THE SOUTH.

States.	September 1, 1891.		January 1, 1893.	
	Looms.	Spindles.	Looms.	Spindles.
Alabama.....	2,045	113,258	3,993	213,358
Arkansas.....	196	6,000	206	16,640
Georgia.....	10,107	456,959	11,637	524,244
Kentucky.....	677	48,750	744	54,688
Louisiana.....	1,428	54,500	1,444	55,132
Mississippi.....	1,327	52,768	1,898	79,772
North Carolina.....	8,310	429,445	11,159	587,708
South Carolina.....	10,977	434,537	13,231	545,586
Tennessee.....	2,032	96,480	2,547	128,852
Texas.....	856	29,476	2,346	77,184
Virginia.....	2,763	94,537	3,418	113,344
Total.....	40,718	1,816,710	52,537	2,375,968

Comparing these figures we find that in sixteen months the number of spindles in the South has been increased by 559,188, and the number of looms by 11,819. The new mills that have been completed and have commenced operations during the past year in the South are as follows:

Cherryville Manufacturing Co., Cherryville, N. C., 3600 spindles.

Stanley Creek Cotton Mills, Stanley Creek, N. C., 2080 spindles.

Caraleigh Mills, Raleigh, N. C., 4600 spindles and 176 looms.

Dallas Cotton Mills, Dallas, N. C., 2080 spindles.

Lexington Manufacturing Co., Lexington, S. C., 3000 spindles and 100 looms.

Union Cotton Mills, Maiden, N. C., 6240 spindles.

Luna Mills, Fort Mill, S. C., 5200 spindles.

Hamburger Cotton Mills, Columbus, Ga., 3000 spindles.

Capitol Manufacturing Co., Columbia, S. C., 12 cards.

Morris Southern Cotton Yarn Manufacturing Co.,

Panola, Ga., 5000 spindles.

McColl Manufacturing Co., McColl, S. C., 3000 spindles.

Lauraglen Mills, Shelby, N. C., 34 spindles.

Union Cotton Mills, LaFayette, Ga., 3500 spindles and 100 looms.

Columbia Cotton Mills, Columbia, Ala., 2000 spindles.

Coosa Manufacturing Co., Piedmont, Ala., 4600 spindles.

Nims Manufacturing Co., Mount Holly, N. C., 2712 spindles.

F. H. Cash, Martinsville, N. C., 1500 spindles.

Powhatan Manufacturing Co., Lambert's Point, Va., 2160 spindles.

Florence Mills, Forest City, N. C., 4000 spindles.

Nottingham Co., Galveston, Texas.

Dallas Manufacturing Co., Huntsville, Ala., 25,000 spindles and 750 looms.

The following list shows the concerns that have been organized during the past year, and whose mills are now under construction, but not yet complete:

Pacolet Manufacturing Co., second mill at Pacolet, S. C., to have 26,224 spindles and 840 looms.

West Huntsville Cotton Mill Co., Huntsville, Ala., to have 5200 spindles.

Thomas M. Holt Manufacturing Co., Haw River, N. C., to have ninety-six looms.

Pineville Cotton Mills Co., Pineville, N. C., to have 3000 spindles.

Great Falls Cotton Mills Co., Rock Island, Tenn., to have 5000 spindles.

Atherton Mills, Charlotte, N. C., to have 7500 spindles.

Gaffney Manufacturing Co., Gaffney, S. C., to have 10,000 spindles.

Pilot Cotton Mills, Raleigh, N. C., to have 2500 spindles.

Swift Cotton Mills, Elberton, Ga., to have 4000 spindles and 125 looms.

Erwin Cotton Mills, Durham, N. C., to have 5000 spindles and 200 looms.

Marble Falls Cotton and Woolen Mills, Marble Falls, Texas, to have 10,000 spindles and 400 looms.

Cedartown Cotton Mill, Cedartown, Ga., to have 3000 spindles and sixty-five looms.

Pearl Cotton Mills, Durham, N. C.

Enterprise Mills, King's Mountain, N. C., to have 2500 spindles.

THE Tennessee Woolen Mills, of McMinnville, Tenn., manufacturers of jeans, linseys, blankets, yarns and penitentiary stripes, contemplate adding a new engine and equipping with electric lights. B. J. Tarver is president of this concern; W. T. Grissim, vice-president; Geo. E. Cartwright, general manager, and B. P. Cantrell, secretary and treasurer. The company has a paid capital of \$40,000.

## SOUTH CAROLINA AND FLORIDA PHOSPHATES.

## Phosphate Industry in South Carolina.

The South Carolina phosphate industry shows a considerable decline in production during the past year, which has been due to a variety of causes. The principal cause was the reduction in cotton acreage and the largely decreased use of fertilizers on the acreage that was put into cotton for the present crop. It is estimated that the consumption of fertilizers in the United States in 1892 was 1,070,000 tons as compared with 1,340,000 tons in 1891, a decrease of 270,000 tons. This decrease was confined almost wholly to the Southern States. The litigation between the State of South Carolina and the Coosaw Mining Co., which caused a suspension of operations in the Coosaw river for more than a year, also largely interfered with the industry and cut down the aggregate production very materially. The settlement of this litigation and the re-opening of the Coosaw territory restores that portion of the industry to the condition of activity, the result of which will be manifest in the production during this year. The competition of Florida phosphates, which are mined at a lower cost and which during the past year have been thrown upon the market regardless of cost, has also been a disturbing factor in the South Carolina industry.

In his annual report as chairman of the board of phosphate commissioners, Governor Tillman speaks as follows of the effect of the Florida phosphate miners upon the South Carolina industry:

"The present condition of the phosphate trade is very unsettled and the market glutted. There have been previous periods of depression, but from other causes than those which have produced the present low prices. Within the last few years very extensive deposits of phosphate rock, both on land and in rivers, have been discovered in Florida, and a large amount of capital has been invested in developing those mines. The rock is of a higher grade than ours, and it is said can be mined much more cheaply, but it has cut a small figure in the markets of the world until within the last twelve months. The Florida miners labor under the disadvantage of having poor shipping facilities and they are handicapped also by higher freights, but their production of rock has been very large, and this has been thrown upon the market for almost any price it would bring; and while we have every reason to believe that the Florida miners are selling below the cost of production, nevertheless their rock is displacing ours and forcing the price down until the margin of profit has grown very small, and with some of the companies may have disappeared altogether. While our miners are admirably equipped for raising the rock and handling it, and have the advantage of geographical location as being nearer the markets of the world, it is almost certain that this Florida competition will prove very formidable, and may necessitate concessions to our miners on the part of the State."

The following table, which has been carefully compiled from official records, gives the shipments of phosphates from South Carolina for each month of 1892, with totals for 1891 and 1890:

SHIPMENTS OF SOUTH CAROLINA PHOSPHATES.  
(Tons of 2240 pounds.)

Months of 1892.	River.	Land.	Total.
January.....	9,840	19,311	29,151
February.....	8,556	13,961	22,517
March.....	14,399	15,434	29,833
April.....	4,908	11,804	16,712
May.....	17,848	14,803	32,651
June.....	20,157	16,124	36,281
July.....	32,266	17,785	49,991
August.....	23,836	24,685	48,521
September.....	13,179	13,543	26,722
October.....	12,467	20,463	32,930
November.....	3,393	9,399	12,672
December.....	3,393	8,668	12,061
Total.....	160,749	185,050	345,699
1891.....	123,033	246,839	369,872
1890.....	196,996	258,818	455,724
Total for three years.....	480,688	691,697	1,172,385

The shipments of phosphate covering the period above mentioned were divided as follows: Of crude land rock the coastwise shipments were 447,747 tons; foreign, 56,345 tons, and by rail, 187,515 tons—total, 691,607 tons. Shipments of river rock were 107,218 tons coastwise, 366,571 tons foreign and 6899 tons by rail—total, 480,688 tons. The grand total of river and land rock shipped, exclusive of river and rail rock for December, was 1,172,295 tons. Shipments of ground rock for the three years were 8490 tons.

In the following table are given the names of the miners operating in the Coosaw river and the amount of rock shipped by each during the year ended October 31, as reported by the Comptroller-General of the State of South Carolina.

PRODUCTION OF PHOSPHATE BY COOSAW RIVER COMPANIES, YEAR ENDING OCTOBER 31, 1892.

Names.	Tons.
Coosaw Mining Co.....	21,522
Sea Island Chemical Co.....	20,781
Oak Point Mining Co.....	37,750
Farmers' Mining Co.....	71,252
Carolina Mining Co.....	40,624
Beaufort Phosphate Co.....	22,403
Ashley Phosphate Co.....	878
James Reid.....	1,896
James O'Hear.....	120
E. M. Seabrook.....	186
John Hanson.....	35
F. W. Wagener & Co.....	470
Total.....	167,927

The amount of rock on hand November 1, 1892, was 78,190 tons.

The great decline in the price of phosphate rock, the increasing competition of more cheaply mined Florida phosphates and the lower cost of mining land rock in South Carolina, upon which no royalty is paid, furnish the South Carolina river miners with strong arguments for the reduction or abolition of the present royalty of \$1.00 per ton on rock mined in navigable streams. Mr. A. W. Jones, inspector for the South Carolina phosphate commission, presents the following view of the question in his last annual report:

"One other fact to which I deem it my duty to call your attention is that, from recent improvements made in the machinery for mining and likewise for handling the rock on the part of the land companies of this State, they are able to mine rock and place the same on shipboard as cheaply as any of the river companies, and as these land companies have no royalty to pay, they will of course have a decided advantage over the river companies."

"In view of the facts above set forth, I think it would be wise on the part of the State to adopt as liberal a policy as the exigencies will admit of toward this industry, in the continuance of which she is so largely interested."

"When we consider the fact that our river miners are required to pay \$1.05 per ton on the dried rock as a royalty, and in addition to this are required to pay State and county taxes on all rock on hand at the time when the tax assessor makes his annual rounds, thus actually amounting to about \$1.10 per ton upon this, and also the additional fact that the average royalty required of the Florida miner is only fifty to seventy-five cents per ton, it will readily be seen at what a disadvantage those engaged in river mining in this State are placed in their efforts to hold the trade which they have built up. In case of a struggle for existence the vital question will be who can sell the cheapest, 'not a survival of the fittest,' but 'a survival of the strongest.'"

## COURSE OF THE MARKET.

The phosphate market of South Carolina had its periods of depression in 1892, but on the whole the general course of trade was steady, the market fluctuating in narrow limits. A most potent factor in producing the decline in values has been the depression in the cotton market, which has lessened to a great degree the use of fertilizers. Other causes have been present to produce their various effects, but in the main the situation at the close of 1892 was better and the outlook more promising for the future. Miners are now better equipped for developing this industry, and in the operations of hard rock many small operators are retiring from the field. At St. Helena's sound, on which is located the principal mining companies, there has been considerable activity during the past year, and river rock sold as low as \$3.75 per ton for 55 per cent. product and as high as \$4.00 per ton; Ashley river \$4.65 to \$5.00, and the year closed with the market steady at \$4.50 to \$5.00. In high grade land rock, 58 to 60 per cent. product, sales were recorded at \$4.50 to \$5.00, and at the close of the year quotations were steady at \$4.75 for Ashley river and \$4.65 to \$5.00 at Charleston; low grade 53 per cent. product \$3.75 to \$4.25 at Charleston.

## The Florida Phosphate Industry in 1892.

By C. Gustavus Memminger.

The statistics attached to this report relative to the movements of phosphate from Florida will fully show the present status of the Florida phosphate industry. The increase from a total shipment of 7600 long tons for the year 1889 to a total shipment for the year 1892 of 283,221 tons indicates a truly remarkable development of the industry. During the past five years the shipments have been as follows:

SHIPMENTS OF FLORIDA PHOSPHATES, 1888-1892.

	Tons of 2240 lbs.
1888.....	3,000
1889.....	7,600
1890.....	56,600
1891.....	180,400
1892.....	283,221

These figures show a steady growth in output under the very adverse circumstance of the prevailing low prices for phosphates.

A careful review of the situation points to a production

of about 325,000 tons for the year 1893. The bulk of this increase will be in land-pebble phosphate. The amount of land-pebble phosphate shipped in 1892 was 13,491 tons; there is now on hand at various mines about 8000 tons, making the total amount mined for the year 21,491 tons. During 1893 we may safely count on the land-pebble shipments amounting to 40,000 tons. River-pebble mining has practically reached its maximum limit. The hard-rock phosphate mining has also reached its maximum unless there is a marked rise in price, consequently the estimate of 335,000 tons, total for 1893, may be taken as conservative and safe. The foreign market practically consumes the entire output of hard-rock phosphate. The consumption of pebble phosphate is equally divided between the foreign and domestic markets. The following table gives, in tons, relative production of hard-rock and pebble phosphate for the years 1891 and 1892:

PRODUCTION OF HARD ROCK AND PEBBLE PHOSPHATE.  
(Tons of 2240 pounds.)

	1891.	1892.	Increase.
Hard rock.....	86,000	177,613	91,613
Pebble.....	94,120	105,608	11,488

From the above it appears that the increase in hard-rock production has been much greater than in the pebble. This very marked increase in hard-rock output, especially considering prevailing low prices, can only be accounted for by the fact that while prices were higher in the latter half of 1891 and early part of 1892, the mines were worked to their full capacities and new mines were opening up. The bulk of this phosphate was necessarily shipped in 1892. A new state of affairs now exists, prices having declined, a system of reduction in working force has ensued, and a consequent decrease in output, in addition to which several hard-rock companies have closed down.

The value of the product for the year is estimated as follows:

Hard rock, 177,613 tons at \$8.....	\$1,420,904
Pebble, 105,608 tons at \$3.50.....	369,628
Total.....	\$1,790,532

Reviewing the history of the year's transactions, the following points are demonstrated:

- 1st. That the foreign markets consume practically all the hard-rock phosphate produced.
- 2d. That the river and land-pebble phosphate is equally acceptable for the domestic and foreign market.
- 3d. That land-pebble phosphate can be mined and washed economically on a large scale by machinery.
- 4th. In 1893 Florida will produce 175,000 tons of pebble phosphate that will be placed in active competition with South Carolina phosphates at home and abroad, but with this advantage in favor of Florida, that the higher grades of pebble phosphate produce a super-phosphate running from 3 to 5 per cent. higher in soluble phosphoric acid than can be made from Carolina rock.

The following tabular statements show the shipments for the year in detail:

SHIPMENTS OF HARD-ROCK\* PHOSPHATE IN 1892.  
(Tons of 2240 pounds.)

From.	Domestic.	Foreign.	Total.
Fernandina.....	5,520	116,742	122,262
Tampa.....	1,000	31,290	32,290
Brunswick, Ga.....	.....	18,061	18,061
By rail to interior.....	4,000	.....	4,000
Consumed in Florida.....	1,000	.....	1,000
Total.....	11,520	166,093	177,613

\*Under the general head "hard-rock phosphate" is included plate rock and boulder rock.

SHIPMENTS OF PEBBLE PHOSPHATE IN 1892.  
(Tons of 2240 pounds.)

From.	Domestic.	Foreign.	Total.
Tampa.....	19,227	2,808	22,035
Punta Gorda.....	19,959	41,314	61,273
By rail to interior.....	19,300	.....	19,300
Consumed in Florida.....	3,000	.....	3,000
Total.....	61,486	44,122	105,608

SHIPMENTS OF PEBBLE PHOSPHATE FROM PUNTA GORDA, FLA., FOR THE YEAR 1892. (Tons of 2240 pounds.)

Month.	Domestic.	Foreign.	Total.
January.....	1,980	.....	1,980
February.....	2,310	2,150	4,460
March.....	1,875	.....	1,875
April.....	975	.....	975
May.....	1,460	5,777	7,237
June.....	1,700	.....	1,700
July.....	1,902	3,750	5,652
August.....	1,400	4,551	5,951
September.....	.....	8,756	8,756
October.....	700	6,980	7,680
November.....	2,442	6,150	8,592
December.....	3,215	3,200	6,415
Total.....	19,959	41,314	61,273

SHIPMENTS OF PEBBLE PHOSPHATE FROM TAMPA, FLA., FOR THE YEAR 1892. (Tons of 2240 pounds.)

Month.	Domestic.	Foreign.	Total.
January.....	2,038	.....	2,038
February.....	850	.....	850
March.....	800	.....	800
April.....	.....	.....	.....
May.....	2,015	.....	2,015
June.....	.....	.....	.....
July.....	.....	.....	.....
August.....	.....	.....	.....
September.....	2,185	.....	2,185
October.....	3,256	400	3,656
November.....	3,702	2,408	6,110
December.....	2,380	.....	2,380
Total.....	19,227	2,808	22,035

SHIPMENTS OF HARD-ROCK PHOSPHATE FROM FERNANDINA, FLA., FOR THE YEAR 1892. (Tons of 2240 pounds.)

Month.	Domestic.	Foreign.	Total.
January.....	.....	5,367	5,367
February.....	.....	5,880	5,880
March.....	830	13,760	14,590
April.....	820	9,471	10,291
May.....	789	15,237	16,026
June.....	.....	7,474	7,474
July.....	828	7,184	8,012
August.....	815	17,154	17,969
September.....	750	10,929	11,679
October.....	888	7,995	8,883
November.....	.....	11,457	11,457
December.....	.....	4,964	4,964
Total.....	5,520	116,742	122,262

SHIPMENTS OF HARD-ROCK PHOSPHATE FROM TAMPA, FLA., FOR THE YEAR 1892 (Tons of 2240 pounds.)

Month.	Domestic.	Foreign.	Total.
January.....	.....	3,125	3,125
February.....	.....	.....	.....
March.....	.....	1,620	1,620
April.....	.....	1,860	1,860
May.....	.....	4,360	4,360
June.....	.....	.....	.....
July.....	.....	3,769	3,769
August.....	.....	2,664	2,664
September.....	.....	.....	.....
October.....	.....	3,700	3,700
November.....	1,000	5,852	6,852
December.....	.....	5,000	5,000
Total.....	1,000	31,290	32,290

#### COURSE OF THE MARKET.

The Florida phosphate market during the past year has shown considerable activity, and the industry of the State has been undergoing a more extensive degree of development than in South Carolina. Low prices have prevailed from similar causes to those in that State, and in the great competition present there has been but a slight improvement in values. During the past year the fluctuations have been narrow, and the market rather easy in tone, while not quotably lower. Values at the close of 1892 were firmer at \$4.00 to \$4.75 for Charlotte Harbor and Tampa 60 to 70 per cent. product, and \$3.50 to \$3.75 for 50 to 55 per cent. product. Florida boulder 75 to 80 per cent. was steady at \$8.50 to \$8.75 f. o. b. Fernandina.

#### The Naval Stores Trade.

SAVANNAH, GA., December 31.

An examination into the statistics of supply and demand of naval stores will show that both production and consumption have increased steadily and considerably during the past few years. But the increase in consumption has not been as great as in production. Especially is this true of the two seasons last past. The consequence is that at present naval stores men find themselves in about the same position that the cotton men occupied at the close of the cotton season of 1890-91. Two seasons of overproduction had glutted the markets and forced prices below the cost of cultivation and marketing. Then followed a "short" season (the present), in which the estimated total yield of cotton, plus the stock carried over, was below the estimated demand for the world's consumption, and a sharp and decided advance in prices resulted. "The world got scared," as an operator expressed it, "and went to buying against the prospects of a shortage." The naval stores people hope to be, by or before the end of the next year, just where the cotton people are to-day. They hope to "scare the world" and make it pay better prices for spirits of turpentine and rosin. In order to do this the folly of overproduction will not be repeated next year; the output as compared with that of the year now about ending will be materially reduced. This will be brought about through the medium of the Turpentine Operators' Association, an organization central in this city, with ramifications throughout the territory tributary to this port and Brunswick, Ga. And, inasmuch as Savannah is the largest naval stores market in the world, having handled last year something like 280,000 packages of spirits out of a total of 480,000, the feasibility of regulating the production from this point is apparent. The operators' organization is most thorough, and any plan of action decided upon by it will be carried out to the letter.

But the turpentine people are not depending entirely upon reducing the production to force prices up. They have on foot a scheme, which will be consummated by May 1, 1893, to build immense storage tanks for spirits turpentine in this city. The tanks will be of 5000 casks' capacity each, and enough of them will be erected to store the whole season's output of the Savannah district, if necessary. Negotiable receipts will be given for spirits so stored, thus removing the necessity of selling at an unsatisfactory price in order to realize. At present London dominates the turpentine market with a reserved stock stored in cellars. It is proposed that in future Savannah shall rule the market by storing the stock heretofore held in London in immense tanks on the banks of the Savannah river. An agent of the Savannah Tank & Supply Co. is now in England gathering information as to the best mode of erecting tanks and other apparatus necessary for the storage of turpentine.

Three States—Georgia, Florida and Alabama—contribute naval stores to the Savannah market, the largest portion of it, of course, coming from this State. The producing territory is gradually being enlarged each year, the growth being in a southerly and southwesterly direction from this point. But an enlargement of territory does not imply an increased output, from the fact that the most advantageously located farms have been or are being worked out, and as the territory is extended the operators must necessarily locate their works further from lines of transportation. This movement away from railroads and rivers, by the way, has been a material factor in making the business unprofitable during the past two seasons.

The present season (for the turpentine year begins April 1) has so far been one of disappointment to operators. Overproduction and high wages to laborers were the causes. On the wage basis for turpentine labor that has obtained during the year—\$19 and "rations" or \$23 all cash per month—it would be necessary to sell spirits at thirty-three cents per gallon, pale rosins at an average of \$3 per barrel, and strained rosins at an average of \$1.25, to make the business even moderately profitable. As the market has ruled below these figures, it will be seen that there has been no money-making in turpentine. The operators have been able to make "buckle and tongue meet," but that is about all. Labor meanwhile did not feel the effect of the low market. The laborers were protected by contracts made last March, when the outlook promised better things than came to pass. When the time comes to make new contracts, however, they will feel it, as the prevailing rate next year will be \$16 to \$17 with rations, or \$20 to \$21 all cash per month. Operators say they cannot pay more until there is a decided improvement in the situation.

The prospects are that next year's output of naval stores in the Savannah and Brunswick territory will be at least 10 per cent. below the output this year. The new boxes cut for the next season will amount to but about 50 to 60 per cent. of the new boxes cut for this season. The finer grades of rosin, it will be remembered, are the products of the new boxes. At the same time, while the decrease in new boxes will be about 40 per cent., the decrease in fine rosins will be only about 15 per cent. This seeming paradox is accounted for in the fact that in Georgia, and nowhere else, there grows a species of pine locally called "loblolly," from the gum of which pale rosins can be made the second year. It should be borne in mind when it is stated that 50 per cent. of the number of boxes cut for this season will be cut for the next, that the statement does not mean the number of producing trees will be increased to that extent, for a number of old trees as great as or greater than the number of new ones will be abandoned as unprofitable. The number of producing trees will, as a matter of fact, be reduced, which is in line with the policy of the operators' association.

As stated above, the turpentine season begins April 1, consequently it is not possible to give statistics of the current year's operations. The tables appended, however, give a statement of the naval stores movement from January 1 to December 31, 1892, which covers a year's time and gives an accurate idea of the regular season's work:

RECEIPTS OF NAVAL STORES AT SAVANNAH.

Months.	Casks of Spirits.		Barrels of Rosin.	
	1892.	1891.	1892.	1891.
January.....	7,552	5,138	97,230	70,055
February.....	3,470	3,599	52,891	35,471
March.....	7,789	4,375	53,116	33,561
April.....	24,214	15,051	56,897	40,686
May.....	40,849	32,054	84,650	71,585
June.....	39,867	31,638	94,911	77,217
July.....	33,740	34,420	95,272	83,348
August.....	29,623	24,185	102,551	82,023
September.....	23,412	21,350	92,458	79,460
October.....	24,202	19,842	84,927	83,859
November.....	26,041	21,447	82,410	68,921
December.....	18,988	16,158	99,395	86,442
Total.....	179,747	229,287	996,708	799,528



## SOUTHERN LUMBER TRADE.

## Statistics That Show the Business Handled at Leading Ports.

The lumber and timber industry of the States bordering on the South Atlantic and Gulf ports has shown more than usual activity during the past year, and the situation at the close possessed many promising features, indicative of a still more successful year in 1893. The demand during 1892 was of an active and pronounced character throughout the milling sections from Norfolk, Va., to Beaumont, Texas, and the progressive action of millmen in all the departments of this industry has a decided tendency to increase the volume of business. Concerted action among lumbermen generally throughout the various Southern States has reduced the lumber business to a more perfect system, and the various companies have completed such organizations as will in future give more tone and strength to the general market. The yellow pine trade, which is the primary one in the South, has grown to immense proportions, and the demand has steadily increased in both the domestic and foreign markets. In hardwoods an extended development is already in progress, and new territory is being opened which will eventually place upon the market millions of feet of oak, ash, walnut and other native woods which heretofore have been left untouched. The harbor improvements at the various Southern ports which have been already made and those projected will add still further to the volume of trade in lumber and timber, and even with present facilities the record of the past year in coastwise and foreign shipments shows a greater volume than any in the history of the industry. The following is a summary of the shipments of lumber and timber from the various ports south of Baltimore from January 1 to December 30, 1892, with the corresponding figures for the same period in 1891:

## SHIPMENTS OF LUMBER AND TIMBER FROM SOUTHERN PORTS.

	1892. Feet.	1891. Feet.
Norfolk.....	203,054,467	276,443,150
Charleston.....	54,905,501	51,226,827
Savannah.....	140,174,413	133,981,375
Brunswick.....	106,225,060	104,860,930
Fernandina.....	57,341,465	44,860,930
Mobile.....	151,647,290	129,150,969
Pensacola.....	321,156,168	287,418,596
Jacksonville.....	45,500,600	38,690,290
New Orleans.....	135,670,870	113,619,064
Total.....	1,395,735,714	1,075,421,141

Below will be found brief mention of the trade features of each of the principal shipping points during the year 1892:

## Baltimore.

Among the primary industries of Baltimore the lumber and timber market presents a greater diversity of interests and conditions and affords a wider field for the investor and capitalist than any other. To the lumbermen of Baltimore the knowledge of all methods pertaining to the trade has long been a valuable acquisition, and the wooded areas from which they draw their supplies have been made a subject of scientific research. Their knowledge of valuable timber territories, coupled with enterprise and capital, has opened up the virgin forests of the Virginias and North Carolina, penetrating also into other States and Territories. The history of the lumber industry of this port dates back to the period when "Baltimore oak" was furnished for the ships of the "King's Navy" and through the various decades the growth of trade has been steady and onward.

The business of the past year has been one of an average character as to volume, while prices have generally tended towards a higher range, and with the exception of a period of depression caused by labor difficulties, there has been a fair movement in progress. The receipts have been liberal, especially in Virginia and North Carolina pine, and the tables of shipments as reported by South Atlantic ports gives Baltimore second place as a receiver. Through shipments of lumber and timber to Europe have been smaller than usual, but the various railroad lines terminating here show a large increase over former years. The demand for various kinds of lumber has been subject to the usual fluctuations, but in kiln-dried North Carolina pine the inquiry has been more decided than in any other. In white pine the business of the year has been fairly active, with prices steady. A liberal demand has prevailed for the various hardwoods, such as oak, ash, walnut and other fancy woods. Shipments of kiln-dried North Carolina pine and other fancy woods have been made to Europe, and from the returns made the indications are that they are becoming very popular for interior decorations, etc. The sources from which the product reaches this port are numerous, and the avenues of distribution in this city and suburban points, through which lumber and timber arrives at its point of destination are also very much

diversified. In compiling the receipts of the port under these conditions great care is necessary in securing correct receipts direct and for through shipment. The tables given below represent the receipts and foreign exports of lumber and timber for the year 1891-92:

## FOREIGN LUMBER EXPORTS FROM BALTIMORE FOR YEARS ENDING DECEMBER 30.

Articles.	1892.		1891.	
	Quantity.	Value.	Quantity.	Value.
Boards, deals & planks, ft.	28,667,000	\$936,035	33,026,000	\$1,041,570
Joist and scantling, feet	227,000	5,933	133,000	3,057
Logs and other timber, ft.	45,252	240,818	72,000	388,316
Other lumber, feet.....	.....	11,256	.....	61,301
Shingles.....	252,000	2,002	224,000	1,754
Shooks.....	11,748	15,724	24,267	37,336
Staves and headings.....	.....	46,079	.....	71,503
Sawed timber, feet.....	6,000	301	209,000	7,636
		\$1,258,148		\$1,612,473

Below we give the receipts of lumber and timber at Baltimore for two years past, which we have obtained direct from the receivers:

## RECEIPTS OF LUMBER AND TIMBER AT BALTIMORE FROM JANUARY 1 TO DECEMBER 30.

Receivers.	1892. Feet.	1891. Feet.
Railroads.....	132,029,577	120,007,784
Merchants & Miners' Transportation Co.	5,251,803	.....
Other steamboat lines.....	15,616,526	.....
Back basin.....	58,874,965	50,250,497
Private wharves.....	70,904,398	50,000,000
Other sources.....	85,013,979	118,434,822
Total.....	367,691,238	338,693,103

\*Included in "other sources."

## Norfolk, Va.

The city of Norfolk, Va., in its lumber record for the year 1892, presents, perhaps, as good a showing as any city on the South Atlantic coast. The industry at this port has a most promising outlook, and with the numerous facilities which characterize every department of the lumber trade its possibilities are almost without limit. The Southside peninsula, from which a large supply of the product reaches this port, may be included in that section of country south of the James, between that river and the Nansemond and the North Carolina line. The counties embraced in this peninsula are Prince George, Surry, Sussex, Southampton, Halifax, Isle of Wight and Nansemond.

The great wooded district, however, of northeast North Carolina furnishes the largest receipts, and from that part of the State lumber and timber are shipped by sound steamers and by rail to this port. The Norfolk peninsula, embracing Norfolk and Princess Anne counties, while not supplying logs and timber, is the primary milling section, and it is in this territory that shape and impetus are given to the general market. The value and importance of the lumber industry is not fully realized by the commercial men of the country, and it has been for years classed as secondary. Facts and figures, however, show that this industry has already become one of prime importance to the commerce of this port. Mr. Samuel R. Borum, secretary of the Norfolk Chamber of Commerce, reports the receipts of lumber for eleven months of 1892 to be 270,054,467 feet, an increase of 14,883,327 feet over the corresponding period of 1891. Of logs 104,126,562 feet were received, being an increase of 32,603,221 feet over last year. The shingle trade of Norfolk has shown remarkable activity throughout the year, and in receipts exhibit an increase of over 3,000,000 during the eleven months under review. In railroad ties the business of the port has largely increased, and in all departments the growth is of a similar character. It is, however, to the millmen of this port that we are to look for the great results which have been accomplished in the lumber trade of the port. Just here a table of the receipts of the port of Norfolk for eleven months of 1892 and for the corresponding months of 1891, as compiled by the secretary of the Chamber of Commerce, will give at a glance the figures of the year:

## LUMBER RECEIPTS AT NORFOLK FOR ELEVEN MONTHS.

Articles.	1891.	1892.	Increase.
Lumber, feet.....	255,171,140	270,054,467	14,883,327
Logs, feet.....	71,523,341	104,126,562	32,603,221
Staves.....	3,798,150	8,224,055	4,425,905
Shingles.....	39,540,476	42,569,746	3,029,270
Railroad ties.....	320,988	574,050	253,062

Of the receipts of crude lumber that appear in the above statement their disposition is quite well understood. The capacity of the perfect milling plants in the city and adjacent points has been quite equal to the liberal receipts of the year, and the manufacture of lumber has progressed with wonderful activity under the excessive demand for

North Carolina pine and other varieties of woods. An organization, incorporated in 1889, known as the North Carolina Pine Lumber Co., has been an important factor in building up trade and reducing to a system the manufacture and sale of lumber. The various milling companies of Norfolk have also brought the manufacture of lumber to a high point of perfection, and the introduction of economical machinery, such as the band saw and other modern appliances, by the Tunis Lumber Co. and others, have also been attended with much success. The introduction of the dry-kiln has enhanced the value of North Carolina pine, and, while there is a large quantity of air-dried placed upon the market, the kiln-dried is in the best demand for general purposes. The shipments by rail and water have progressed with remarkable activity and promptness under the modern methods recently adopted, and the condition and classification of lumber previous to its shipment have received more attention. The general course of the market during the year has been very satisfactory to operators, and the business of the closing month of December will develop perhaps the largest volume of business of any month during the year.

## Charleston, S. C.

The general features of the lumber and timber market at Charleston, S. C., during the year have been of a more encouraging character, and the condition of this industry at the close is somewhat improved. Every year brings increased facilities for shipping, and the improvements in the harbor now in progress will contribute largely in benefiting the lumber trade of the port. The supply of lumber during the year has been larger than usual, and the many new sources of production which have been opened up by railroads tapping the forests of the State have furnished better stocks and further means of competing with other ports. As to the range of values, they have generally been more steady and tending slightly higher under a good demand for certain grades which have been popular in domestic and foreign markets. The foreign trade has been of moderate proportions, and the West Indies and South America have been the principal buyers. There is a better demand now from these countries, and every year promises a better volume of trade. It is the coastwise business which has made the best showing, and the trade with Northern ports is growing remarkably well. New York, Philadelphia and Baltimore are the three largest receivers, while other ports have also purchased liberally. The total shipments to foreign and domestic ports from January 1, 1892, to December 30, were 54,965,501 feet, and for the commercial year commencing September 1, 1891, and ending September 1, 1892, were 53,246,608 feet. The shipments from September 1, 1892, to December 30 were as follows: New York 12,543,759 feet, Philadelphia 1,734,292 feet, Baltimore 840,000 feet, Boston 634,740 feet, other United States ports 709,000 feet. Foreign shipments were 1,173,096 feet, and the total coastwise and foreign were 17,934,887 feet.

## Savannah, Ga.

One of the most important ports on the South Atlantic coast is the city of Savannah, Ga., which also ranks among the first of the lumber shipping points. The record of the past year shows an interesting development of the business and a steady increase in volume. The general status of the whole market is more satisfactory than it was a year ago, the better organization of the lumbermen of the State having been a factor to this end. In a review of the trade of the year, one of the most notable features has been the increased demand during the summer months, being fully 50 per cent. greater than that of 1891. The business in cross-ties may have caused a greater volume of trade for this midsummer period, and no doubt did increase the shipments materially. The record of shipments of lumber from the port of Savannah presents very encouraging figures, and taking the record from January 1 to September 1, 1892, we find the coastwise shipments by sail 75,045,624 feet, by steamer 13,431,820 feet, and foreign 10,183,177 feet, making a total of 98,660,621 feet, against 90,428,393 feet for the corresponding period in 1891. The tone of the market since September 1, the commencement of the commercial year 1892-93, has been fairly active, prices have been very steady, the margin of profits has been slightly better, and for certain dimensions of choice lumber the market was firm and higher at the close of the year.

The shipments of lumber and timber since September 1 to December 30 has been as follows: 43,513,792 feet of lumber, also 2,690,000 shingles, 1820 cases of cedar, 3862 cedar logs, 78,000 staves, 2860 bundles of laths and 389,620 cross-ties. Total shipments for the year from January 1 to December 30 are 140,174,413. From the above figures it is evident that the current commercial year of 1892-93 will show a larger volume of business, and the outlook on all sides is much more encouraging. The harbor improvements are getting in better shape, and

tangible results are noticeable in the channel leading to the sea. About four months ago vessels drawing twenty-one feet three inches left the wharves and passed out to sea, and on spring tides vessels drawing much more than this could easily go to sea. The appropriation is being well expended towards getting a twenty-six-foot channel, and when completed the facilities for shipping will be first-class. With all these and other improvements in progress to increase the commerce of the port, the lumber and timber trade will show a corresponding improvement.

#### Pensacola, Fla.

In reaching out for first place as a shipping point for lumber and timber among the Gulf ports, Pensacola has made rapid advancement during the year. About the same conditions govern this market as Mobile, and while the volume of business in the lumber and timber industry shows an increase over that of last year, the trade has been largely restricted by the low stage of water in the streams flowing into the bay.

The present condition of trade is well illustrated by figures furnished at the end of the year closing October 31. The shipments of hewn timber to Great Britain were 216,822 cubic feet, of sawn timber 126,210,000 superficial feet, and of lumber 19,531,000 superficial feet; also 3248 cubic feet of oak.

To the Continent the shipments aggregated 241,450 cubic feet of hewn timber, 41,241,000 superficial feet of sawn timber, and 52,829,000 superficial feet of lumber. Africa took 1,179,000 superficial feet of hewn timber and 625,000 superficial feet of lumber, and South America, West Indies, etc., 38,070,000 superficial feet of lumber, while the coastwise shipments were 20,773,000 superficial feet of lumber.

These figures show a grand total of 458,272 cubic feet of hewn timber, 168,630,000 superficial feet of sawn timber and 131,768,000 superficial feet of lumber. For the corresponding period in 1891 the hewn timber shipped aggregated 530,133 cubic feet, sawn timber 142,887,000 superficial feet, and of lumber 122,250,000 superficial feet. In hewn timber there was a decrease in shipments, owing to a change in the demand, which favored sawn timber, and of which a large increase is recorded.

The volume of trade since November 1 has been very considerable, and the outlook for the future is considered on all sides as encouraging. Advances from points in the interior represent considerable activity in all milling sections, and the development of new territory and erection of milling plants show that lumbermen have confidence in the future of Pensacola as a point of shipment. The formation of an association to regulate prices and systematize trade will also tend to strengthen the market and invite foreign trade.

The total shipments from January 1 to December 30, 1892, are as follows: Hewn timber 466,009 cubic feet, sawn timber 175,479,000 superficial feet, and of lumber 140,085,000 superficial feet. From the above figures the total shipments for the year in superficial feet will aggregate 321,156,108 feet, against 287,448,596 feet for 1891.

The movement in shingles during the year has been very important, and the business is steadily growing, the coastwise shipments for the year being 3,004,000 and to the West Indies 25,000.

#### Mobile, Ala.

The commercial history of Mobile gives it rank as one of the most prominent of the Gulf ports, and it has long been known as one of the leading ports for the shipments of cotton. The valuable timber lands of Alabama and Mississippi also contribute largely to the commerce of the port, and the lumber and timber industry of the city has long held a position of great importance among the Gulf ports. The shipments for eight months of the year 1892 show a remarkable increase over those of 1891, the gain in lumber and timber being nearly 16,000,000 feet, and 6,800,000 more than the largest previous record shows. The shipments of lumber since September 1 of 1892 aggregated 23,378,530 superficial feet, against 18,605,853 feet for the corresponding period in 1891. Of hewn timber 602,495 cubic feet have been shipped since September 1, against 442,106 cubic feet in 1891. Shipments of sawn timber for the same period reached 588,425 cubic feet, against 230,382 cubic feet in 1891. The total shipments since September 1, according to the above, are 37,769,570 superficial feet, being an increase of 10,993,861 feet over the corresponding period of 1891. The total shipments from January 1 to December 30, 1892, aggregated 151,647,290 feet, against 129,150,909 for 1891. The general market throughout the year has shown considerable activity, and in the main prices have been very steady for lumber. Timber, both hewn and sawn, has been scarce and higher, but prices in Europe for some time past have not been such as to encourage shippers. The improvement in the lumber industry of the port may be attributed to several reasons, the principal one, however, being the improve-

ment of the harbor, and very soon vessels of the largest class will enter. The decline in cotton has affected the shingle trade to a great extent, but under the conditions a most remarkable showing is recorded. The Mobile Shingle Association has been incorporated, and with a complete organization this branch of the lumber industry is represented as quite flourishing. The business during the year has been very considerable, reaching sales of over 100,000,000.

#### Maryland's Canning and Packing Industry.

The fruit and vegetable-canning industry, which ranks among the most important in Maryland, has had a fairly prosperous year. The pack of fruits and vegetables has been large in everything but peaches, the peach crop of the past season having been only about one-sixth of the usual crop. About 360,000 bushels of green peas have been canned, and the pack of small fruits and berries has been of about usual proportions. The tomato pack has been larger than for several years. The output of the Maryland canneries during the past season is estimated to be about one-third of the entire product in the country. A dozen years ago Maryland canners produced about five-sixths of the entire output. Maryland's smaller percentage at the present time is not due to any decline in this State, but to the rapid growth of the industry elsewhere. Maryland's business is increasing, not diminishing.

While Baltimore counts canning among her greatest industries, a surprisingly large amount of business is done elsewhere in Maryland. In Kent, Queen Anne's and Caroline counties there have been forty-five plants in operation during the past fall, employing from fifty to 500 hands each. In the vicinity of Westminster are thirty plants, numbering from forty to 450 hands each, while at the present time Harford county, just northeast of Baltimore, has 200 farmers who pack from 2000 to 20,000 cases each in a season. This counts up seventy-five plants outside the individual packers and the large houses in the city. The exact number in the State now in active operation is not exactly known, as some have shut down after working on one brand of goods, but experts reckon the establishments outside the city hiring over fifty hands this season at ninety-five. None of these employs over 500 people. The individual packers of over 2000 cases capacity are figured at 325, Harford county having over one-half.

Harford county appears to have been the pioneer section of the country in vegetable packing. Going back thirteen years, one finds that nearly 300 farmers had packing-houses on their places, with a little machinery of a crude type and the hand process very slow. But the profits were so large that many of the growers became wealthy. They supplied the New York market and sold to jobbers at prices which ran as high as \$1.25 per case, and the orders often ran as high as 10,000 and 15,000 cases at one time. But finally the market began to be worked by speculators, and about six years after the time mentioned prices were forced down to fifty and fifty-five cents, and in one instance to 37½ cents per dozen. This depression ruined scores of packers, and nearly 150 left the business in Harford county; but a reaction set in, prices went up to eighty-five and ninety cents, and for the last five years there has been a slow but steady increase in the section named, until 200 are this year making small profits from the industry. Harford county's specialty is corn and tomatoes. The soil is excellent for these vegetables, and the pack is considered "A1" by the trade.

As to the other sections outside of the city, packers in and around Westminster have put up cherries, lima beans and peaches this season, as the western Maryland peach crop was only a partial failure, and, while the peaches of this section are only fair for preserving, they found a ready demand, owing to the general failure of the crop elsewhere. Going to the Eastern Shore, one finds peaches, strawberries, blackberries, raspberries, in fact, all sorts of berries, put up this season, while tomatoes were substituted largely for peaches, which is the great pack of Kent, Queen Anne's and Caroline counties. Lima beans and string beans were also packed extensively.

Baltimore has forty packers, who have employed from 50 to 1650 hands this year. Besides these are fifteen of what the trade term "alley packers," who put up pickles as well as fruit and oysters, and sell them in small lots to retailers as well as jobbers. This year close estimates put the number of persons working in all these houses at 12,000, or 3100 more than the census figures for 1890, while 8000 more work in canmaking, box and other factories where machinery and goods for packers are turned out. These figures are based on estimates of December 1, when oysters and fruit were both being packed. The wages of those in the packing-houses ran from \$1.00 to \$12.50, averaging \$6.25 a person. In other words, \$75,000 was paid for labor in these houses in a week.

Statisticians in the canning trade base their estimates

of the pack considerably upon the output of the can-making shops in Baltimore, which supply 90 per cent. of Maryland's trade. Including December, it is estimated that 112,000,000 2 and 3-pound cans were made in these shops, of which 75,000,000 went to the city packing-houses and the balance to the State at large. This would put the total output of the vegetable and fruit trade in city and State, including pineapples, at about 125,000,000 cans.

Pineapple packing is an industry monopolized by Baltimore houses. From a small beginning ten years ago it has grown steadily until 250,000 cases won't be too large a figure to put on the output for 1892. A number of schooners of 144,000 capacity each run during the season to the West Indies, and in the height of the ripening period the weekly receipts will average over 50,000 dozen. T. B. Shaw is about the largest pineapple importer in Maryland, and has a fleet of vessels in the trade. "Pine" packing lasts from May 10 to about July 31, and during the past season 574,000 dozen of the fruit were imported and packed in Baltimore.

#### OYSTER PACKING.

One has to approach the oyster question with diffidence. No subject has ever been more discussed by packers than the oyster catch. On the question, "Is it decreasing or increasing?" you will find experts almost equally divided. In 1881 900 schooners and pungies with crews averaging five men each were engaged in dredging Chesapeake bay and its tributaries. About 2000 boats with two men each were in the tonging trade, and half as many crafts with two or three men in the crew were scraping. In all nearly 12,000 men followed the business. This season the best judges place the number of dredge boats at 675, tongers 1500 and scrapers at 750, with a total of 8250 men in the business.

Advocates of the theory that oysters are being all dredged out of the Chesapeake say business has fallen off because the supply has fallen off. Their opponents say many of the oyster boats have become used up, and that the high licenses have driven men out of the business. Whoever is right, these are the figures. In 1891-92 Baltimore firms took care of about 5,600,000 bushels, a falling off of about 2,500,000 bushels from the year previous. The year 1892-93 from present indications will show receipts of 5,750,000 bushels. In 1880 you could easily buy a bushel of medium size and quality at twenty to twenty-five cents; now fifty cents is no more than a fair price.

One bushel of fair-sized cove or cooked oysters will yield about fifty-four ounces of solid meat. This season will see at least 2,250,000 bushels of "coves" put up, or about 7,600,000 pound cans.

From the above figures some idea may be gained of the condition of the business, as the balance of the 5,740,000 enters into the raw trade principally. Besides the forty large packers in Baltimore, a large quantity of oysters are now cared for at Crisfield and St. Michael's, on the Eastern Shore of Maryland, and at Annapolis, at the mouth of the Severn river. Baltimore takes about two-thirds of the Chesapeake supply and the balance is divided among these places.

The two-and-a-half-inch cull law, most oystermen admit, was very instrumental in causing the large falling off in the production of 1890-1891. By it no oysters can be brought to market whose shells are less than two and a-half inches from lip to hinge. There is no doubt but what the law is frequently violated and thousands of undersized oysters taken, but still the law has had a good effect on many of the vessel captains and prevented them from carrying seed oysters to market.

The packing business for the year has been regarded as fair. Oysters are usually in great demand during a presidential year, but this year was a notable exception, the demand being light so far. The outlook, however, for Maryland packers is unusually bright, as it is known that the stocks of canned goods all over the country are very light, especially in the West. A very large temporary demand will also be created by the Columbian Exposition, and it is generally believed by the trade that the year 1893 will be a red letter one with the packers of all sorts of food.

In this connection the appended statistics of the Maryland oyster industry will be of interest:

	1880.	1891.
Persons employed.....	13,748	22,161
Capital invested.....	\$1,928,379	\$6,672,202
Oysters caught, bushels.....	10,600,000	9,545,058
Value of oysters.....	\$4,730,476	\$5,395,866

A CHARTER has been granted to the Hope Lumber Co., of Marshall, Texas, with a capital stock of \$80,000 and the following incorporators: John Martin, D. H. Scott, W. C. Pierce, E. J. Fry and J. Palford.



## IRON TRADE OF THE SOUTH IN 1892.

## A Year of Large Production, but of Low Prices.

The year 1892 has been an unsatisfactory period for the iron and steel industries of the whole country. At the beginning of the year production of all kinds of iron and steel was large and prices were weak and declining. The activity in the blast furnace industry, which was a prominent feature of the closing months of 1891, was continued at the beginning of the present year, and the consumption was not sufficient to absorb the heavy output. Stocks of unsold pig iron therefore increased and the competition for business led to declining prices, which continued through the summer months, and in July and August the quotations for pig iron were the lowest ever before known in the history of the trade in this country.

The rate of production of pig iron, however, gradually decreased with the decline in prices, reaching its lowest point during the month of September. The monthly rate of production during the year 1892 is shown in the following table, compiled from various pig iron authorities. The total production for the first six months of the year is the official total of the American Iron and Steel Association, the data for the latter half of the year being estimated from well-known sources:

	Gross Tons.		Gross Tons.
January.....	839,384	July.....	723,061
February.....	797,462	August.....	684,307
March.....	848,020	September.....	668,887
April.....	786,202	October.....	733,710
May.....	786,426	November.....	739,326
June.....	741,622	December.....	785,628
Total first half.....	4,799,956	Total second half.....	4,344,649

The production for 1891 and 1892 by half years is shown in the following statement, the figures for the last half of 1892 being estimated:

	1891. Gross tons.	1892. Gross tons.
First half.....	3,368,167	4,799,956
Second half.....	4,911,763	4,344,649
Total.....	8,279,930	9,144,605

The reduction in output, which began in June and continued to October, brought the production somewhat below the consumption, causing stocks to diminish. These conditions of the industry stimulated buyers to greater activity in placing orders, resulting in a stiffening of prices during the fall months, but a weakening tendency developed during the closing weeks of the year. The range of prices of Southern No. 1 foundry pig iron at Cincinnati as given in the following table graphically shows the course of the Southern pig iron trade during the year. The prices have been obtained by averaging the quotations for each week:

Month.	Highest.	Lowest.
January.....	15.25	14.75
February.....	15.25	14.50
March.....	15.60	14.25
April.....	13.75	13.75
May.....	14.25	13.75
June.....	14.25	13.50
July.....	14.00	13.25
August.....	13.75	13.25
September.....	13.75	13.25
October.....	14.00	13.25
November.....	14.00	13.75
December.....	14.00	13.75

Notwithstanding the active competition for business in the leading markets of the country, and the low prices which the furnace companies were compelled to accept for their products, the Southern producers have suffered less from the reactionary influences of the trying periods of 1891 than the Northern and Western works. The average prices of pig iron have been so low that the Southern furnace owners have been forced to adopt a more careful and economical system of management and reduce the cost of production by closer attention to the materials used in the furnaces. The experience thus gained has, in a great measure, benefited the Southern producers, as it has brought forward more prominently the advantages which the works in this section possess as competitors in the markets of the country. Greater attention to the preparation of the coal and coke used, purer ores, and the more effective discipline of the labor at the different plants, have not only resulted in lower costs and larger output per furnace, but have to a considerable extent improved the character of the pig iron made. While there have been very few new iron and steel enterprises started in the South during the past year, the majority of the older plants have been actively employed throughout the year, and a number of the works which were under construction at the beginning of the year have been completed and put in operation. A review of the progress in the different States is given in detail below.

## Production of Pig Iron.

In the following statement we give the production of pig iron in each of the Southern States during 1891 and 1892. The figures for the last half of 1892 have been compiled from returns received directly from the manufacturers and by the aid of our numerous correspondents throughout the iron-producing districts of the South. While the totals are, therefore, to some extent estimates, it is believed that they closely approximate the actual figures of production during the period mentioned. The statistics prior to June, 1892, are those of the American Iron and Steel Association:

PRODUCTION OF PIG IRON IN THE SOUTH IN 1891.  
(Tons of 2240 pounds.)

States.	Jan.-June.	July-Dec.	Year.
Maryland.....	44,636	78,763	123,399
Virginia.....	126,703	168,589	295,292
North Carolina.....	896	2,321	3,217
Georgia.....	18,215	31,642	49,857
Alabama.....	336,064	459,612	795,676
Texas.....	7,558	11,104	18,662
West Virginia.....	18,729	67,553	86,282
Kentucky.....	16,767	28,977	44,844
Tennessee.....	129,523	162,215	291,738
Total.....	699,089	1,009,876	1,708,965

PRODUCTION OF PIG IRON IN THE SOUTH IN 1892.  
(Tons of 2240 pounds.)

States.	First half.	Sec'd half.	Total.
Maryland.....	49,981	55,562	105,543
Virginia.....	164,086	181,247	345,333
West Virginia.....	86,238	88,985	169,223
Kentucky.....	32,649	14,535	46,984
Tennessee.....	157,214	166,269	317,482
North Carolina.....	1,853	1,015	2,868
Georgia.....	3,330	6,270	9,600
Alabama.....	479,131	469,471	948,602
Texas.....	6,403	2,257	8,660
Total.....	974,885	979,410	1,954,295

## Maryland.

In Maryland the chief interest in iron and steel matters centres in the operations of the Maryland Steel Co., at Sparrow's Point, near Baltimore. The four blast furnaces and large steel-rail plant of this company were completed and put in operation in 1890, as was also the shipyard of the company. A number of vessels were constructed at the yard during 1892, and the equipment of the plant is being constantly increased, so that the company will soon be enabled to build the largest vessels required for any service. An open-hearth steel plant will be added to the works to supply material for the manufacture of plates and shapes for bridges and buildings as well as for ships.

Maryland is the only Southern State which has yet gone into the new industry of manufacturing tinplate. Four enterprises of this kind have been developed in the State. The Locust Point Iron and Steel Works of Coates & Co., which commenced erecting a tinning plant in 1891, completed it in 1892, and began turning out an excellent quality of tinplate, making the black plate in its own rolling mill. Last summer the plant was burned, but has been rebuilt on a larger scale, and the firm has recently been changed to a company under the name of the Locust Point Iron & Steel Works Co. Messrs. Matthai, Ingram & Co., of Baltimore, are large manufacturers of tinware and have erected a tinning plant for coating purchased black plates. The Cumberland Steel & Tinplate Co., of Cumberland, Md., is composed largely of Philadelphia capitalists, who have purchased the Crown and Cumberland Steel Works, at Cumberland, and equipped it with new machinery for the rolling and finishing of black plates for tinning. The company expects to be able to start the rolling of black plates early this year. On the last day of 1892 an experimental run was made in another new tinplate mill at Canton, Baltimore, which has recently been built by Mr. E. Rice Daniel, the proprietor of the Crom Felin Works in Swansea, Wales. This plant will have capacity for coating 2000 boxes per week.

The machinery formerly operated by the Paterson Iron Co. at Paterson, N. J., has been removed to Curtis Bay, Baltimore, and a merchant bar mill is being added, about 8000 tons of bar iron being used annually by neighboring manufacturing establishments. The new concern will be known as the Baltimore Rolling Mill Co., and will give special attention to the manufacture of steel plates.

No new blast furnace enterprises have been started in Maryland during 1892, and the only noteworthy change in the old establishments is the sale last spring of the well-known Principio furnace property to a new organization called the Whitaker Company.

## Virginia.

The two furnaces of the Appalachian Steel & Iron Co. at Big Stone Gap have been completed, and one of the stacks was first blown in on May 4. The company uses coke made from the same vein as Pocahontas, near Big

Stone Gap, and makes a specialty of low phosphorus and standard foundry pig iron.

The Alleghany Iron Co. completed its coke furnace plant at Iron Gate during the month of November, and the first cast was made on December 1. The furnace is 65x13 feet, with 70x16 fire-brick stoves, and has an annual capacity of 20,000 tons.

Mr. Frank Lyman, of New York, has purchased the partly constructed furnace of the Covington Iron Co. at Covington, and work is being actively pushed towards the completion and starting up of the plant. The furnace will be of large size and well equipped, and is expected to be able to produce close to 50,000 tons annually.

The furnace of the Radford-Crane Iron Co. at Radford and the furnace of the Max Meadows Iron Co. at Max Meadows have both been completed, but not yet blown in.

The Dora furnace of the Pulaski Development Co. at Pulaski City was completed early in the year and was blown in on May 23. This furnace is 75x17 feet in size, has three Whitwell stoves and is rated with a capacity of 50,000 net tons of pig iron yearly.

The Roanoke Iron Co. completed during the early part of the year its rolling mill at Roanoke, and it was first put in operation in September. The plant is well equipped, and its puddling department is numbered among the largest in the State.

The Salem Rolling Mill Co., which began in 1891 the erection of a rolling mill at Salem to manufacture muck bar and cotton ties, has not yet completed its works, owing to legal complications. The buildings are erected and part of the machinery is on the ground, but not yet in place. Arrangements have recently been effected to complete the erection of the plant for the manufacture of cotton ties, and it is expected that the mill will be finished and started up at an early day.

The Crescent Horseshoe & Iron Co. has completed its rolling mill at Max Meadows, and the horseshoe machinery formerly operated in Baltimore by W. F. Holliday & Co. has been removed and erected in the works of the Crescent Company. The Shenandoah Iron Co. has completed the fine merchant mill which it was building at Shenandoah early in the year, and the new plant will be operated in connection with the company's present blast-furnace plant at the same place.

The Glasgow Rolling Mill Co., of Glasgow, and the Buena Vista Steel Co., of Buena Vista, commenced the erection of works in 1891, the former to manufacture merchant bar iron and the latter open-hearth steel. Work was suspended on both of these plants, and has not yet been resumed.

## North Carolina.

The completion of the large coke furnace of the North Carolina Steel & Iron Co. at Greensboro marks an important advance in the iron industry of North Carolina. This is the first furnace built in the State to use coke, although the Cranberry furnace, which has alternated between charcoal and coke, will in the future, as it has done during the larger part of the past year, employ the latter fuel exclusively. The North Carolina Steel & Iron Co. owns and controls extensive local deposits of iron ores which are low in phosphorus and sulphur, and in designing its plant special attention was given to the economical loading, handling and transporting of the various raw materials necessary to the manufacture of pig iron. Coke from the Pocahontas district will be used. The company proposes erecting at an early day a rolling mill for the manufacture of bar iron, and also shops for the construction of freight cars.

## Alabama.

There have been no additions during the past year to the list of iron and steel works in existence in Alabama at the beginning of 1892, but several noteworthy changes have taken place in the industry of the State during this period. The most important event to be noted is the consolidation of the Tennessee Coal, Iron & Railroad Co., the DeBardeleben Coal & Iron Co. and the Cahaba Coal Mining Co. The union of these companies makes the new corporation, which preserves the name of the Tennessee Coal, Iron & Railroad Co., by far the largest producer of pig iron for the open market in the world. The new company controls seventeen blast furnaces, four of which are in Tennessee and thirteen in Alabama, with an annual capacity of about 600,000 tons of pig iron, while the coal mines are capable of producing 3,000,000 tons of coal annually and the coke ovens 1,000,000 tons of coke. The company contemplates turning part of its pig iron output into steel, plans for a steel plant being already matured.

The financial embarrassments of the enterprises at Fort Payne have not yet been so adjusted as to lead to the resumption of work at that place. The Talladega furnace property, which was in a receiver's hands for a considerable time, has been sold and is to be operated by the Talladega Furnace Co., a new organization. The

Jenifer Iron Co. at Jenifer has rebuilt its charcoal furnace and equipped it with fire-brick stoves, while the Bass Furnace Co. has remodeled its charcoal stack at Rock Run.

The Henderson open-hearth steel plant at Birmingham, which has been idle for the past two years, is again being put in working shape. Improvements have been adopted which it is expected will greatly cheapen the cost of the product. Negotiations are pending for the erection of steel plants and the starting up or enlargement of several rolling mills in Alabama, but we make no mention of these enterprises, as definite arrangements have not yet been made.

#### West Virginia.

The most important event in the iron industry of West Virginia during the past year was the consolidation of the interests of the Benwood Iron Works, the Wheeling Iron & Nail Co. and the Belmont Nail Co. under the name of the Wheeling Iron & Steel Co. The new company now owns and operates three blast furnaces, three large nail mills and one sheet mill, besides a two-thirds interest in the Wheeling Steel Works. The three companies above mentioned have long been numbered among the largest nail manufacturers in the country, and as such have exerted a great influence in the nail trade. Under the new arrangement, with the consequent reduction of expenses and the elimination of a considerable competitive element, the consolidated company should be a still more potent factor in this branch of the iron business. The works of the new company have an aggregate annual capacity for manufacturing 130,000 tons of pig iron and 1,100,000 kegs of nails, besides a large quantity of muck bar for sale, skelp iron and iron and steel sheets. The company is considering plans to enlarge the plant to include the manufacture of wrought-iron pipe and structural and bridge material.

#### Kentucky.

There have been no important changes during the year in the iron industry of Kentucky. The two large coke furnaces of the Watts Steel & Iron Syndicate, Limited, at Middlesborough, which were completed in 1891, have not yet gone into blast, but are now stocking up preparatory to starting. The construction of the extensive open-hearth steel plant of this company, which was seriously delayed by the financial embarrassment of the contractor, has been pushed forward, and the works are now practically finished. The charcoal furnace of the Cumberland Gap Iron Co., which was started in 1890, is not yet erected. The Grand Rivers Co. blew in its two new charcoal furnaces at Grand Rivers early in the year, but both are now cold. The old Licking furnace at Newport, which has been idle for many years, has been abandoned.

Outside of the work of the Watts Syndicate at Middlesborough and the improvements at the Newport Rolling Mill Co.'s plant at Newport and at other works in the State, nothing of importance has taken place in the rolling mill and steel industry of Kentucky. The Ashland Steel Co., which made the first blow in its Bessemer converters on December 26, 1891, has secured good results in the operations of its works. This is the first and only Bessemer steel plant in the State. It is expected that the machinery removed from the South Boston Iron Works will shortly be set up at Middlesborough.

#### Tennessee.

The Embreeville Freehold, Land, Iron & Railway Co., Limited, a company composed of English capitalists, completed its coke furnace at Embreeville early in the year, and the first cast of metal was made on March 31. This furnace is 80x19 feet, and is one of the largest stacks in the South. The annual capacity of the furnace is about 50,000 tons of foundry iron. Local hematite ores are used, smelted with coke from the Pocahontas field.

Three other furnaces have been added to the active list of works in this State, all of which were far advanced toward completion at the beginning of the year. The furnace of the Carnegie Iron Co. at Johnson City and the furnace of the Gracey-Woodward Iron Co., of Clarksville, were built to use coke, but neither stack has yet been put in operation. The furnace of the Napier Iron Works went into blast on February 10, using charcoal.

The Southern Iron Co. is engaged in removing its Nashville furnaces at West Nashville to a better field for the supply of raw materials in Wayne county. The old Cumberland furnace in Dickson county belonging to this company has been abandoned, and work has been commenced upon the erection of a modern furnace plant at the same place. Nothing has been done by the Cardiff Coal & Iron Co. towards the erection of the furnace started in 1890, upon which work was suspended.

The plant of the South Tredegar Iron Co. at Chattanooga, which was sold under foreclosure proceedings, will probably be dismantled and the machinery sold. Besides the works of the Lookout Iron Co., which was removed from Chattanooga to Harriman, the latter city will soon

have a muck bar mill, which is being built by D. W. Duke and James McCoy, under the name of the Harriman Rolling Mill. This mill will contain one heating furnace and three puddling furnaces, and will roll muck bar and special shapes for railroad use. It is expected that the mill will be running by March.

The Roane Iron Co. at Rockwood, Tenn., has concluded to tear down one of its old stacks and erect a larger and more modern furnace in its place. The plans have all been prepared, and as soon as certain financial matters have been arranged, which late reports state will be very soon, this work will be undertaken.

### THE SOUTHERN COAL INDUSTRY.

#### Statistics of Production by States—New Mining Companies Organized During the Year.

From figures which we have gathered from mining companies, from State officials and from numerous well-posted correspondents, we place the total output of bituminous coal in the South in 1892 at 24,612,647 net tons, as compared with 23,636,312 tons in 1891, showing an increase of 1,000,000 tons. The following table shows the production by States for two years past. For the sake of uniformity we have reduced the figures in all cases to net tons of 2000 pounds:

PRODUCTION OF COAL IN THE SOUTH.  
(Tons of 2000 pounds.)

States.	1891.	1892.
Alabama.....	4,759,781	5,125,000
Arkansas.....	542,379	565,000
Georgia.....	171,000	160,000
Kentucky.....	2,843,082	2,997,037
Maryland.....	3,831,251	3,378,222
North Carolina.....	11,440	6,500
Tennessee.....	2,413,678	2,750,000
Texas.....	172,100	190,000
Virginia.....	736,399	750,000
West Virginia.....	8,155,202	8,710,888
Total.....	23,636,312	24,612,647

The increase in Alabama, Kentucky, Tennessee and West Virginia as compared with 1891 is about 1,250,000 tons, but the decrease in the output from the Cumberland region of Maryland reduces this gain by nearly 500,000 tons. The increase for the year is much smaller than for several years past, but the industry has been in a very satisfactory condition throughout the year, and development has taken place in several directions which will result in an immediate increase in the output to supply new markets that have been made available. There have been fewer new mining companies organized than in previous years, but existing concerns have been well engaged and as a rule have worked up to their capacity.

#### Maryland.

In order to make them conform to the practice followed in other States, we have reduced the figures for the Cumberland region to short tons, the table below containing the output by the Maryland companies during the past two years:

PRODUCTION OF COAL IN MARYLAND.  
(Tons of 2000 pounds.)

Companies.	1891.	1892.
Consolidation Coal Co.....	1,020,294	284,664
American Coal Co.....	503,587	1,022,321
Maryland Coal Co.....	455,240	198,234
George's Creek Coal & Iron Co.....	399,758	333,348
Borden Mining Co.....	336,300	5,781
New Central Coal Co.....	231,630	154,265
Barton & George's Creek Valley Co.....	225,299	86,538
Potomac Coal Co.....	206,871	16,577
Union Mining Co.....	200,740	225,529
Franklin Consolidated Coal Co.....	85,784	74,685
Big Vein Coal Co.....	70,372	11,780
Piedmont-Cumberland Coal Co.....	47,532	430,843
Swanton Mining Co.....	36,992	314,658
Anthony Mining Co.....	10,592	225,599
Total.....	3,831,251	3,378,222

The following table gives the production for the State for ten years past:

PRODUCTION OF COAL IN MARYLAND.  
(Tons of 2000 pounds.)

1883.....	2,476,075
1884.....	2,765,617
1885.....	2,833,337
1886.....	2,517,577
1887.....	3,278,023
1888.....	3,479,479
1889.....	2,939,715
1890.....	3,357,813
1891.....	3,831,251
1892.....	3,378,222

The shipments from the Cumberland region by the Chesapeake & Ohio Canal in 1892 amounted to 265,799 long tons, as compared with 51,390 tons in 1891. The shipments in 1892 were by the following companies: Consolidation Coal Co., 209,112 tons; George's Creek Coal & Iron Co., 35,262 tons; Black, Sheridan & Wilson, 18,074 tons; West Virginia Central, 3004 tons; Anthony Mining Co., 346 tons.

#### Virginia.

Most of the coal ordinarily assigned to Virginia properly belongs to West Virginia, although the outlet of the chief producing region, the Flat-Top field, is through Virginia. The production for Virginia is given by the United States Geological Survey as follows, with the exception of 1892, which we have supplied:

PRODUCTION OF COAL IN VIRGINIA.  
(Tons of 2000 pounds.)

1888.....	1,073,000
1889.....	865,786
1890.....	784,011
1891.....	736,399
1892.....	760,000

The figures for 1888 probably include shipments of coal from the Flat-Top field in West Virginia.

The coal traffic of the Norfolk & Western Railroad in 1892 amounted to 128,582 cars of coal and coke, as compared with 116,566 cars in 1891. The shipments in December, 1892, were 12,266 cars.

The increase in the coal trade of Norfolk is shown by the following statement of Pocahontas coal cleared by William Lamb & Co. during the past three years:

SHIPMENTS OF POCAHONTAS COAL FROM NORFOLK.

	1890.	1891.	1892.
Foreign.....	37,723	27,997	25,683
Coastwise.....	920,451	1,106,245	1,364,467
To steamers.....	102,755	135,112	128,329
Ocean tugs.....	14,507	18,780	20,871
Local.....	71,010	90,606	96,869
Total.....	1,152,507	1,468,743	1,636,199

In 1892 coal was taken by 1694 vessels at Lambert's Point, Norfolk, as against 1630 in 1891, 1439 in 1890, and 1147 in 1889.

The following companies organized during 1892:

Big Stone Gap Colliery Co., Big Stone Gap.  
James River Coal Co., Huguenot.  
Kinney & Wegner, Staunton.  
Virginia Hard Coal Co., Vickar's Switch.  
Elliott's Knob Iron, Steel & Coal Co., Buffalo Gap.

#### Kentucky.

Mr. C. J. Norwood, inspector of mines, gives us the production of coal in Kentucky during 1892 as follows:

OUTPUT OF BITUMINOUS COAL IN KENTUCKY.

For eleven months ending December 1, 1892:	Short tons.
Lump.....	1,050,683.88
Nut.....	295,344.92
Mixed lump and nut.....	437,775.48
Run of mines.....	498,599.44
Pea.....	68,177.52
Slack.....	195,512.48
Miscellaneous.....	116,594.12

Total to December 1.....2,652,597.84  
Estimated for December.....314,439.80

Total for the year.....2,967,037.64

OUTPUT OF CANSEL COAL.

For eleven months ending December 1, 1892.....	49,683
Estimated for December.....	4,130
Total for the year.....	53,813

PRODUCTION OF COKE.

	Western field.	Eastern field.	Total tons.
For 11 months to December 1.....	27,236.95	4,714.25	31,951.20
Estimated for December.....	3,399.00	500.00	3,900.00
Total for the year.....	30,536.95	5,214.25	35,751.20

The table given below contains the figures of Kentucky's production for a term of years:

PRODUCTION OF COAL AND COKE IN KENTUCKY.  
(Tons of 2000 pounds.)

Years.	Bituminous.	Cannel.	Coke.
1880.....	946,288		4,250
1881.....	1,100,000		4,370
1882.....	1,300,000		4,070
1883.....	1,650,000		5,025
1884.....	1,550,000		2,223
1885.....	1,600,000		2,704
1886.....	1,650,000		4,528
1887.....	1,933,195		14,595
1888.....	2,342,058	41,825	23,150
1889.....	2,205,434	40,825	9,340
1890.....	2,483,144	49,382	20,710
1891.....	2,843,082	49,870	32,663
1892.....	2,967,037	53,813	35,751

During the past year the following companies have been organized in Kentucky:

Monarch Coal & Coke Co., Pike county.  
Southern Land & Improvement Co., Pineville.  
Jellico & Birdseye Coal Co., Jellico.  
Ohio Valley Coal & Mining Co., De Koven.  
Little Sandy Coal & Land Co., Grayson.  
Todd Coal Co., Beattyville.  
Lee Coal Co., Beattyville.  
Southern Coal Association, Louisville.  
Powell's Valley Coal & Iron Co., Louisville.  
Mingo Coal Co., Middlesborough.  
Kentucky Cannel Co., Louisville.



## West Virginia.

The production of coal and coke in West Virginia for a period of years is shown by the following tables, the figures being from the annual reports of the mine inspectors:

## PRODUCTION OF COAL IN WEST VIRGINIA.

Years.	(Years ended June 30.)	Net tons.
1880.....		1,404,008
1881.....		1,803,984
1882.....		2,416,960
1883.....		3,142,234
1884.....		3,249,839
1885.....		3,369,662
1886.....		3,598,664
1887.....		4,936,820
1888.....		5,375,564
1889.....		5,405,107
1890.....		8,002,086
1891.....		8,155,202
1892.....		8,710,888

PRODUCTION OF COKE IN WEST VIRGINIA.  
(Years ended June 30.)

Years.	Net tons.	No. ovens.
1880.....	121,715	631
1881.....	164,058	689
1882.....	202,103	878
1883.....	225,893	962
1884.....	228,472	1,005
1885.....	260,571	1,078
1886.....	284,166	1,154
1887.....	442,031	2,080
1888.....	499,985	2,137
1889.....	360,716	2,453
1890.....	892,490	3,442
1891.....	1,238,418	4,117
1892.....	1,313,449	5,490

The shipments from the Flat-Top field reached near the 3,000,000 mark last year, the total being 2,950,000 tons, a gain of over 600,000 tons for the year. The shipments via Norfolk & Western Railroad for five years past have been as follows:

FLAT-TOP COAL AND COKE SHIPMENTS.  
(Tons of 2000 pounds.)

Year.	Coal.	Coke.
1888.....	1,567,983	202,808
1889.....	1,813,745	310,504
1890.....	2,044,567	433,319
1891.....	2,341,220	466,016
1892.....	2,950,000	550,000

The coal traffic of the Chesapeake & Ohio Railroad for 1892 amounted to 3,088,104 net tons, which represents a gain of 300,000 tons over the business of 1891.

The upper Potomac region shows a loss of 28,666 tons in 1892 as compared with 1891. The output for two years is shown below:

PRODUCTION OF COAL IN UPPER POTOMAC REGION.  
(Tons of 2000 pounds.)

Companies.	1891.	1892.
West Virginia Cent. & Pitts. Elk Garden.....	473,413	403,972
Davis Coal & Coke Co.....	154,562	115,725
Thomas mine.....	75,427	122,002
Davis & Elkins mine.....	112,275	86,087
Elk Garden Big Vein.....	6,810	43,079
Cumberland Coal Co., Douglas mine.....	15,734	70,898
Atlantic & George's Creek.....	103,980	46,301
Hampshire mine.....	2,719	25,965
Big Vein Coal Co.....	637	4,376
Miscellaneous.....	1,494	.....
Total.....	947,071	918,405

The upper Monongahela field produced during the year ended June 30, 1892, 913,893 tons of coal and 227,030 tons of coke, as compared with 722,594 tons of coal and 165,482 tons of coke during the year preceding. The output of the mines in the Fairmont district for the calendar year 1892 is given as follows:

	Coal. Tons.	Coke. Tons.
Monongah Coal & Coke Co.....	376,535	89,185
Montana Coal & Coke Co.....	163,788	62,046
Gaston Coal & Coke Co.....	132,490	26,173
West Fairmont Coal & Coke Co.....	75,569	15,475
Acme Coal & Coke Co.....	31,518	8,175
Hutchinson Coal & Coke Co.....	19,873	8,362
Clark Coal & Coke Co.....	15,107	641
Virginia & Pittsburgh Coal & Coke Co.....	6,285	.....
Total.....	821,165	210,057

The Clark Coal & Coke Co. commenced shipping coal in May and its coke ovens were lighted November 15. The Virginia & Pittsburgh Coal & Coke Co. began shipping coal last June and has a coke plant now under construction. The output of coal in this district has been somewhat restricted of late on account of the scarcity of cars, and it is anticipated that this section will increase its output two-thirds during 1893.

The new coal and coke companies in West Virginia during the year are as follows:

L. O. Smith, Colliers.  
Shawnee Coal & Coke Co., Elkhorn.  
Bryar Hill Coal & Coke Co., Fairmont.  
Brooklyn Coal Co., Fayette county.  
Junior Coal Co., Junior.  
West Fork Coal & Coke Co., Fairmont.

Dunlow Coal Co., Dunlow.

Clark Coal & Coke Co., Fairmont.

Belington Coal & Coke Co., Belington.

Long Creek Co., office, Richmond, Va.

Phoenix Coal & Coke Co., Elkhorn.

Hope Mining Co., Paint Creek.

Phoenix Mining Co., Paint Creek.

Glen Falls Coal & Coke Co., Clarksburg.

A. J. Flesher, New Haven.

Eureka Coal & Coke Co., Dans Branch.

Jefferson Coal Co., Piedmont.

Peerless Coal & Coke Co., Elkhorn.

Greenbrier Coal & Coke Co., McDowell.

Snowy Creek Coal & Coke Co., Corinth.

Rolfe Coal & Coke Co., Rolfe.

Queen City Coal Co., Queen City.

Elk Ridge Coal & Coke Co., Elkhorn.

Ferguson Splint Coal Co., Ferguson.

Roanoke Coal & Coke Co., Rolfe.

Philippi Coal & Coke Co., Philippi.

Pennsylvania Coal & Mining Co., Belington.

Valley Coal & Lumber Co., Philippi.

Falling Rock Cannel Coal Co., Charleston.

Baltimore Mining Co., Charleston.

Ford Run Coal Co., Philippi.

Cunard Coal Co., Rush Run.

Grayton Mining Co., Grayton.

Arbuckle Creek Coal & Coke Co., Fayetteville.

Wells Branch Coal Co., Moses Fork.

Jefferson Coal Co., Piedmont.

James Grant, Rowlesburg.

Arlington Coal & Coke Co., Elkhorn.

Adaline Coal & Coke Co., Adaline.

Bayard Coal & Coke Co., Bayard.

Cedar Grove Consolidated Coal Co., Cedar Grove.

Sterling Coal & Manufacturing Co., Clifton.

Kanawha Coal & Coke Co., Coalburg.

Preston Lumber & Coal Co., Corinth.

Logan Cannel Coal Co., Huntington.

## North Carolina.

Prof. J. A. Holmes, State geologist, gives us the following concerning coal in North Carolina during 1892: In 1891 the Egypt Coal Co., at Egypt Depot, in Chatham county, shipped 11,440 tons of coal. When the company was on the eve of a large and profitable business, a fire occurred in the mine on December 6, 1891, which necessitated stoppage of work and reduced the output for 1892 to about 6500 tons. For the past six months the company has been engaged in introducing a largely increased plant of machinery, including the addition of three pumps under ground and further hoisting capacity. A second shaft, 8x10 feet, is being sunk upon the property, to be used exclusively for ventilating purposes. Adjacent property is also being explored, and a diamond drill has been put down about 400 feet, with results that are entirely satisfactory.

## Alabama.

The increase of 140,000 tons in the pig iron production and the natural growth of the domestic and steam coal trade indicate that the output of coal in Alabama in 1892 was close upon 5,125,000 net tons, as compared with 4,759,781 tons for 1891. The output of coal in Alabama during a term of years has been as follows:

PRODUCTION OF COAL IN ALABAMA.  
(Tons of 2000 pounds.)

1885.....	2,492,000
1886.....	1,800,000
1887.....	1,950,000
1888.....	2,900,000
1889.....	3,572,983
1890.....	4,090,469
1891.....	4,759,781
1892.....	5,125,000

The production of coke for a period of years is given as follows in the report prepared for the United States Geological Survey by Joseph D. Weeks and just published:

PRODUCTION OF COKE IN ALABAMA.  
(Tons of 2000 pounds.)

1885.....	301,180
1886.....	375,054
1887.....	325,020
1888.....	508,511
1889.....	1,030,510
1890.....	1,072,942
1891.....	1,282,496

Our records show the following new concerns as having gone into business in Alabama in 1892:

American Coal Co., Birmingham.  
Carbon Hill & Lost Creek Coal Co., Carbon Hill.  
Harrison Mining Co., Dogwood.  
Harrison Coal Co., Montevallo.  
E. M. Tutweiler, Adamsville.  
Red Mountain Mining Co., Coal Mines.  
Jack & Nicholson, Attalla.  
D. A. Hughes, Attalla.

## Tennessee.

The coal production of Tennessee during the past eight years has been as follows, the figures prior to 1892 being those given by the United States Geological Survey:

PRODUCTION OF COAL IN TENNESSEE.  
(Tons of 2000 pounds.)

1885.....	1,440,957
1886.....	1,714,290
1887.....	1,900,000
1888.....	1,967,297
1889.....	1,925,689
1890.....	2,169,595
1891.....	2,413,678
1892.....	2,750,000

The output of coke as given by the United States Geological Survey has been as follows:

PRODUCTION OF COKE IN TENNESSEE.  
(Tons of 2000 pounds.)

1885.....	218,842
1886.....	368,139
1887.....	396,979
1888.....	385,663
1889.....	359,710
1890.....	348,728
1891.....	364,318

The following new mining concerns have started during the past year in Tennessee:

L. N. Farley, Sequachee.  
East Tennessee Mining Co., Harriman.  
Frozen Head Mine Co., Harriman.  
A. L. Spears, Jasper.  
Sale Creek Coal & Coke Co., Sale Creek.

## Texas.

The production of coal in Texas during the past four years is figured as follows, the output prior to 1892 being as given by the United States Geological Survey:

PRODUCTION OF COAL IN TEXAS.  
(Tons of 2000 pounds.)

1889.....	128,216
1890.....	184,440
1891.....	172,100
1892.....	190,000

There has been a good deal of activity in the organization of new concerns for the development of the coal resources in Texas, the following being among the new firms and companies formed in 1892:

White Ash Coal & Mining Co., Dallas.  
Peerless Coal Co., Calvert.  
Kniffin Coal, Coke & Mining Co., Dallas.  
Rockdale Mining & Manufacturing Co., Rockdale.  
Star & Crescent Coal Co., Coleman.  
Joel P. Webber, Belcherville.  
Southwestern Fuel Co., Fort Worth.  
Minerva Colliery Co., Laredo.

## ASSESSED VALUE OF PROPERTY.

A Net Gain of Over Sixty-Six Millions of Dollars  
in 1892.

The assessment of taxable values is the most forcible method of demonstrating real progress, but is, however, incomplete testimony as to the actual extent of this progress. There is in every State a large taxable basis that manages to elude the investigations of the tax assessors, and besides one's conception of value, is susceptible to a sudden decline when these same agents put in appearance. These conditions make it impossible to correctly estimate the actual value of a State's wealth and as well insure against any overvaluation. In the South during the year 1892 some notable changes were made in values by the assessments of that year. There are ten out of the fourteen States showing a total increase over the assessment of 1891 of \$89,104,823. West Virginia leads the ten with an increase of nearly \$20,000,000; Georgia is a close second with \$18,783,779. The others are as follows: Tennessee \$11,929,538, Kentucky \$10,417,606, Virginia \$9,564,894, Arkansas \$7,250,000, Maryland \$5,134,451, North Carolina \$5,124,394, South Carolina \$608,558 and Texas \$326,317. The decrease in the remaining four States, Alabama, Florida, Louisiana and Mississippi, aggregates \$22,765,016. The net increase is therefore \$66,339,807. The official figures from each State show the following valuations:

## ASSESSED VALUATIONS OF SOUTHERN STATES.

States.	1891.	1892.	Inc.
Alabama.....	\$275,316,491	\$260,926,127	dec. \$14,390,364
Arkansas.....	180,000,000	187,250,000	inc. 7,250,000
Florida.....	97,547,005	95,260,000	dec. 2,287,005
Georgia.....	414,569,755	493,753,534	inc. 79,183,779
Kentucky.....	542,349,932	552,764,538	inc. 10,414,606
Louisiana.....	235,769,639	234,915,174	dec. 854,466
Maryland.....	510,403,077	515,137,528	inc. 4,734,451
Mississippi.....	167,114,503	161,881,312	dec. 5,233,191
North Carolina.....	257,052,256	262,176,050	inc. 5,124,394
South Carolina.....	168,262,669	168,871,227	inc. 608,558
Tennessee.....	360,570,462	372,500,000	inc. 11,929,538
Texas.....	866,200,283	866,526,600	inc. 326,317
Virginia.....	451,608,274	461,167,168	inc. 9,564,894
West Virginia.....	193,525,038	213,490,324	inc. 19,965,286
Total.....	\$4,740,280,375	\$4,806,620,182	inc. \$66,339,807

THE citizens of Jacksonville, Fla., are now organizing a stock company with a capital of \$500,000 for the purpose of purchasing land and inducing manufacturers of various kinds to locate in this city. Mr. Chas. H. Smith, secretary of the Board of Trade, is leading the movement.

## Manufacturers' Record.

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BALTIMORE, JANUARY 6, 1893.

### Notice to Advertisers.

*The last forms containing advertisements  
are closed on Tuesday afternoon. New adver-  
tisements or changes should be received not  
later than Tuesday noon to ensure attention  
in the issue bearing date of the following  
Friday. Reading matter should be in our  
office on Wednesday, although late news can  
be received early Thursday morning.*

THE decrease in cotton receipts has be-  
gun to assume alarming proportions, and  
from present indications there appears to  
be a possibility merging on to a proba-  
bility that the crop will be smaller than  
any since 1884-85. December returns  
show a falling off of 402,795 bales for the  
month and 1,717,000 bales for the season  
to date as compared with last year, the  
receipts being smaller than for the same  
month during the past twelve years. The  
portion of the crop received prior to Janu-  
ary 1 during the past eleven years has  
averaged 73 per cent., the maximum  
being 78.9 per cent., with a crop of 5,669,-  
021 bales in 1884-85, and the minimum  
63.2 with a crop of 6,992,234 in 1882-83.  
The present receipts to the last of Decem-  
ber are 4,729,086 bales, and assum-  
ing this to be 73 per cent. of the crop,  
the total would be 6,005,939 bales. On  
the basis of its being 63 per cent., as in  
1882-3, the total crop would be 6,431,911.

THE Secretary of the Navy on several  
occasions has followed the policy of dis-  
tributing the contracts for war ships in  
such a manner as to develop the ship-  
building plants at various points, so that  
the entire dependence of the govern-  
ment shall not be upon any one estab-  
lishment. This policy has been applied,  
we believe, in the awarding of contracts  
to the Bath Iron Works, Bath, Me., and  
the Union Iron Works, San Francisco,  
even though slightly lower bids were re-  
ceived from other builders. In pursu-  
ance of such a policy, which is un-  
doubtedly a wise one, it seems that there  
ought to be a broader apportionment of

the work now under consideration in  
preference to placing all the work with  
one concern, as seems to be likely. It  
would not be unwise to give the con-  
struction of at least a single ship to the  
great establishment that has grown up  
at Newport News, Va., and it is to be  
hoped that the efforts now being exerted  
to that end will be successful. Governor  
McKinney, of Virginia, has urged the  
importance of this matter upon Secre-  
tary Tracy, and we hope that the New-  
port News establishment will receive  
the recognition which it merits.

THE value of exports from Southern  
ports during the eleven months of 1892,  
as compared with the same period in  
1891, shows that notwithstanding the  
great decrease in cotton exports this  
season, there has been but a slight fall-  
ing off in the total values, and conse-  
quently points to a considerable increase  
in exports of other materials. In 1892  
the exports amounted to \$9,000,000 less  
than in the preceding year, but this  
season's exports of cotton from Southern  
ports have been 400,000 bales short of  
the same period last year, representing  
value of nearly \$18,000,000. This makes  
a difference of \$9,000,000, which may be  
credited to increased exports of bread-  
stuffs and other products. This is  
shown clearly in returns from New Or-  
leans, which would be most heavily  
affected by the smaller amount of cotton  
sent abroad, but actually shows a small  
gain in total values of all exports. At  
other large cotton exporting points,  
Galveston and Savannah, the decrease  
in values is apparent, more so at the  
latter port, but considering the heavy  
reduction in cotton shipments, all ports  
make an excellent showing.

### The British Spinners' Strike.

THE strike among cotton operatives in  
Lancashire has now been in progress  
for nearly nine weeks, and as yet no reli-  
able indication of a break are to be seen.  
From some source a statement has been  
published to the effect that a compro-  
mise would be effected between part of  
the operatives and employers during the  
week, but thus far nothing of the kind  
has taken place, and the leaders deny  
that any proposition has been favorably  
considered by them. Both sides stubbornly  
hold their positions—the manufacturers for  
a reduction on account of the unprofitable  
condition of the trade, and the operatives  
for the same pay and shorter hours, by  
which they hope to decrease production  
and advance prices. The fallacy of this  
reasoning is demonstrated by the fact  
that the mills have been idle nearly a  
quarter of a year, and the market has  
not been seriously affected. Further, it  
is opening a market into which Bombay  
manufacturers are sending their goods,  
and herein lies a menace to the Ameri-  
can cotton producers. India now con-  
sumes nearly all the cotton grown there,  
and has made little effort to increase  
its production of the staple, because  
American cotton controlled the largest  
consuming market—Great Britain. If  
the consumption of this market is cur-  
tailed and Bombay manufacturers ex-  
pand into the trade formerly held by  
it, it plainly means a reduction in con-  
sumption of American cotton. Besides  
this, both Japan and China are steadily  
growing as consumers of raw cotton, and

if the consumption increases in India,  
the production will increase in greater  
proportion, and probably keep pace with  
the needs of these countries. Of course  
these are only possibilities, but the gen-  
eral trend of events is such as to give  
them a fair chance of becoming accom-  
plished facts. Until the Nicaragua Canal  
is completed there is no chance of Ameri-  
can cotton controlling the markets of  
India and the East, and this gives the  
South all the more earnest reason for  
wishing godspeed to this enterprise.  
Already the effects of the Lancashire  
strike are apparent in our cotton exports  
to that country, not alone from the lack  
of purchases by that district, but also  
from the unsettled feeling given to the  
entire spinning industry in Great Britain.

### Southern Progress in 1892.

Our annual statistical review, which  
occupies the greater part of our present  
issue, presents a very interesting and  
complete compilation of statistics, show-  
ing the growth and progress of Southern  
industries, railroad, financial and com-  
mercial interests during the year 1892.  
The iron industry of the South has shown  
a great deal of activity notwithstanding  
the extreme low prices and the depres-  
sion which has existed in some parts  
of the country. The output of pig iron  
in the Southern States, as obtained  
direct from the producers, amounted to  
1,954,295 gross tons in 1892, as com-  
pared with 1,708,965 tons in 1891, being  
an increase of 245,330 tons, or nearly 15  
per cent. During 1892 eleven new blast  
furnaces were completed, and most of  
them went into operation. Six of these  
new furnaces were in Virginia, one in  
North Carolina and four in Tennessee.  
Three rolling mills were also built during  
the year—two in Virginia and one in  
Tennessee.

The coal industry of the South has  
been in a condition of activity and pros-  
perity throughout the year, and the out-  
put increased from 23,636,312 tons in  
1891 to 24,612,647 tons in 1892. During  
1892 eighty-four new coal-mining con-  
cerns went into business in the South.

The railroad mileage of the Southern  
States was increased in 1892 by the con-  
struction of 1053 miles of new railroad.  
The most notable feature of the year in  
railroad circles was the number of re-  
ceiverships created, which embraced  
twenty-two roads, aggregating 10,243  
miles, representing \$174,779,657 in capi-  
tal stock and \$131,416,160 in bonds. In  
the reorganizations begun or completed  
during the year twenty-four roads were  
included, representing \$139,164,450 of  
capital stock and \$128,007,492 in bonds,  
and aggregating 6,509 miles of road.

The reduction in the estimated acre-  
age of cotton for the present season as  
compared with the season of 1891-92 is  
over 3,300,000 acres, and the best esti-  
mates point to a crop of not exceeding  
6,500,000 bales for the present season, as  
compared with 9,035,379 bales during  
the last season.

The foreign trade of the South for  
eleven months of 1892 shows a net de-  
crease in exports amounting to \$9,183,-  
195. The decrease in the exports of  
cotton alone is estimated at about \$15,-  
000,000, while the increase in the gen-  
eral export trade and in the shipments  
of cereals from Southern ports was  
about \$6,000,000. During the year 1892  
a number of new steamship lines have

been started at Southern ports, which  
promise a large increase in foreign trade  
in the immediate future.

In the last sixteen months the number  
of spindles in Southern cotton mills has  
been increased by 559,188 and the num-  
ber of looms by 11,819. On January 1,  
1893, the cotton mills of the South con-  
tained 52,537 looms and 2,375,908 spin-  
dles. The consumption of cotton by  
Southern mills increased from 603,133  
bales in 1891 to 682,297 bales in 1892.

The phosphate industry of the South  
shows shipments of 629,920 tons from  
Florida and South Carolina in 1892, as  
compared with 550,272 tons in 1891.  
The South Carolina shipments decreased  
from 369,872 tons in 1891 to 346,699 tons  
in 1892, but the Florida output increased  
from 180,400 tons in 1891 to 283,221 tons  
in 1892.

The total number of new industrial  
establishments organized during 1892  
was 2688.

The shipments of lumber from nine  
leading Southern ports aggregated  
1,305,735,714 feet in 1892, compared with  
1,075,421,141 feet in 1891.

The assessed valuation of property in  
the South shows an increase from  
\$4,740,280,375 in 1891 to \$4,806,620,182  
in 1892.

### The Dog Nuisance in the South

A correspondent of the Atlanta *Con-  
stitution* points out in a recent issue a  
difficulty which sheep-raisers in the  
South are only too familiar with, the  
depredations of dogs. This gentleman,  
with a companion, purchased a tract of  
land near Atlanta over a year ago, and  
started to raise sheep and spring lambs  
for the market. Owing to the heavy losses  
caused by dogs killing their stock, they  
have been forced to abandon the enter-  
prise, and will return to their former  
homes in the North.

Georgia and our other Southern States  
have no laws imposing a tax on dogs,  
and consequently the country is over-  
run with them. The negroes especially  
have a penchant for canines, and always  
one and often half a dozen miserable  
curs will form a part of their family  
group. White farmers of the poorer  
class are similarly equipped. The dogs  
range over the country destroying sheep  
and poultry, chasing and often biting  
horses and cows, and fighting with and  
many times killing valuable dogs owned  
by the better class of people. Their  
depredations are continual, and a con-  
stant menace to every thrifty farmer.

The instance mentioned is only one of  
many where this same difficulty has  
caused heavy losses and the aban-  
donment of sheep-raising. On the  
mountains and hills of the Tennessee  
valley, which seem peculiarly adapted  
to the industry by reason of abundance  
of good grazing land and pure water, as  
well as a most favorable climate, sheep-  
raising as a business has been tried a  
number of times, and in each case the  
losses occasioned by dogs killing the  
sheep has been the prime reason for  
abandoning the enterprise. Cases are  
known, and not by any means ex-  
ceptional, where in one night out of a  
flock of some two hundred sheep twelve  
or more have been killed and others in-  
jured, and this when the nearest house  
was three miles distant. In Mississippi  
the same state of affairs exists, and in at  
least one instance a flock of about



seventy-five sheep and lambs pastured in a well-fenced field during a night was changed to fifty sound sheep, some seventeen injured, some so badly that they died the following day, and nine dead, six lambs and three sheep. The owner of these sheep turned them out on the next night and, with a companion, shot four dogs which came into the field; the owners were found in some negroes living not far distant, and in true Mississippi fashion it was gently intimated to them that if another "sheep-killing" occurred it would be followed by unpleasant consequences. This was quite efficacious so far as these people were concerned, as they promptly disposed of their other dogs, and within a week after the incident no one living within a mile of the sheep farm owned a dog. But this did not by any means stop the trouble; hardly a night passed that some sheep were not killed, so finally the experiment was given up in disgust.

Even in middle Tennessee, one of the finest and best cultivated sections of farm land in the country, there is annoyance and loss from the same cause. Indeed, it is doubtful if any Southern State is free from it, and yet the remedy is simple, merely passing an act imposing a tax on each dog. Were such an act passed it would surprise the legislators to find the small number of dogs which would be claimed by their owners and the very large number which would belong to nobody. These latter are the ones which do harm and which unquestionably, as will be verified by everyone who has tried sheep-raising, have done more to cast it into disfavor than any other cause.

It seems absurd that such an important industry to the South as sheep-raising should be retarded by such cause, and yet this is literally the fact. It appears still more extravagant to believe that efforts to provide the remedy have been obstructed and failed to pass the legislatures into which they have been introduced, and this, too, is fact. In nearly every State efforts have been made to do away with the dog nuisance and at the same time add to the State's revenue, but have not been successful. If damage of equal value was annually done by tramps the governors and legislators would be overrun with letters and depositions demanding some means of preventing it. But it is only the dogs, and those who suffer are only the thrifty farmers, who, unfortunately, are in the minority, and the benefits which might be derived from sheep-raising are only prospective, and voting for a dog tax might be objected to by the negro constituency, so the matter has been, and will be shelved until the legislators can be compelled to recognize the necessity for it.

HOPEDALE, MASS., December 29.

Editor Manufacturers' Record:

Dear Sir—We consider your paper an excellent advertising medium, and it is at present the only one published South in which we are represented. That fact alone speaks for itself. Yours truly,

(Signed) GEO. DRAPER & SONS.

THE C. A. Edgarton Manufacturing Co., of Shirley, Mass., manufacturers of suspenders, a Massachusetts corporation with a capital of \$50,000, employing from 150 to 175 hands, is looking for a place to relocate its business, its principal desire being to locate in a town or city where female help is plenty.

### Cotton Manufacturing in the South.

BOSTON, MASS., January 2.

Editor Manufacturers' Record:

I have read with much interest the communication of Mr. Furlow Holt that appeared in your issue of December 23, in partial reference to my article that was published in your December 2 number on cotton manufacturing in the South.

Mr. Holt writes as one familiar with his subject, and for that reason it is a pleasure to take cognizance of the semi-criticism of two or three points which he selected from my remarks. Mr. Holt and I, probably, would agree upon the advantages that the South possesses for the economical manufacture of cotton, except, possibly, upon the subject of the incapacitating effect of the climate on the physical energies of mill operatives. The treatment of this one subject, however, would require more time than I can give to it now, and more space in this journal than I care to consume. But I have in my possession testimony upon testimony from Southern manufacturers and mill engineers who are conversant with factory matters in the South, of the enervating effect of Southern climate on the physical energies of the people not only in the southern, but in the northern and more hilly sections of that part of our country. It seems to be admitted that the Northern factory operative can accomplish a tenth more work in the same length of time than the Southern operative. My own observations during a residence of several seasons in the South seem to confirm the truthfulness of these statements. I do not wish to be understood, however, as asserting that climatic influences are of sufficient potency to act so inimically upon the healthy growth of cotton manufacturing in the South as to be in any sense destructive.

Facts past and present are enough to disprove any statement of this kind. The debilitating effect of the climate in the South, nevertheless, is a disadvantage enough in itself to eliminate any and all advantages that the South may have over the North in cotton manufacturing. I do not, therefore, concur in Mr. Holt's assertion that "it is only a question of time when they (the Northern manufacturers) will be forced to come South or go out of business."

Mr. Holt alludes to my remarks about the greater number of hands to 1000 spindles in the South than in the North and says:

There are several reasons for this. One is, there are more children employed in the South than in the North, and the mills also make coarser threads than they do in the North. Also the labor in the South is new at the business and inexperienced, and in many cases management and executive ability are lacking, as well as practical experience. The number of operatives per 1000 spindles in the South has decreased to some extent, and is still on the decrease, and it will continue to be so as we have more experience, better and more improved machinery, make finer threads and have more capital.

I admit all this. I simply referred to a fact now existing which will undoubtedly right itself in time. I know very well that more hands are required per thousand spindles in a coarse than in a fine mill, even when the machinery is especially adapted to the work required of it. For instance, a girl in the carding department of a New England mill can run two speeders on 3.50, 4 or 4.50 hank roving; but put these same speeders on 2 or 2½ hank roving, and the girl would have more than she could do. Again, a spinner can attend to from 1000 to 1500 spindles on number 30 to 45 yarn, while the same hand could not attend to more than 600 or 800 spindles on number 12 or 20 yarn, or to more than 400 or 500 spindles on number 8 yarn, and it would require as many again doffers for number 8 yarn as it would for number 20 yarn. I am supposing that these changes were made on the same machinery, which in practical manufacturing would not be the case if the most economical results

were expected. Better results, of course, could be accomplished than here stated if the coarse yarns were made in a mill equipped especially for their manufacture and the fine yarns in a mill equipped for their manufacture. I am having very carefully collected data on this particular subject made for me by two coarse-yarn mills and two fine-yarn mills, which I may make use of upon some opportune occasion, in order to explain or get a reason for the statistical difference between the number of hands per thousand spindles employed in Northern and Southern mills.

A partial explanation of this difference is to be found in the fact that a very much larger number of mule spindles are run in the Northern than in the Southern mills. Number and twist being the same, at least 15 per cent. more yarn can be spun on a ring frame than on a mule, per thousand spindles. This condition existing, more hands would be required per thousand spindles in Southern mills, where nearly all are frame spindles, than in Northern mills, where a large proportion of the spindles are mule. There are many "ifs" and "ands" to be considered in comparing cotton manufacturing in the South with that in the North. Neither section has all the advantages exclusively to itself.

HENRY G. KITTREDGE.

### Peaches in Georgia.

[S. F. Garlington in the Charleston News and Courier.]

The home of the peach is Georgia. Imagine what a sight, in summer, to behold hundreds of acres planted in peach trees, all laden with the very finest varieties of this luscious fruit. Perhaps many of your readers would be surprised with the rapidity with which the cultivation of this fruit is being extended in Georgia, the value of this crop to the State, and the enormous profits derived therefrom.

The largest peach orchard in the world is that of the Ohio Fruit Land Co., situated near Fort Valley, Ga., and in about the same latitude as Charleston, S. C. This orchard at present contains 150,000 trees, and is being enlarged every year. Fort Valley ships more peaches, perhaps, than any other point. The largest orchards around Fort Valley are the following: Ohio Fruit Land Co., 150,000 trees; Hale Georgia Orchard Co., 125,000 trees; Albion Georgia Fruit Co., 110,000 trees; the J. H. Hall Co., 100,000 trees; Maioma Valley Co., 70,000 trees; the Gray-Arrick Fruit Co., 60,000 trees; N. Deitzen & Bro., 75,000 trees; Deitzen & Shumway, 50,000 trees; the Troy Fruit Co., 40,000 trees; Fort Valley Land Fruit Co., 25,000 trees; Major Geo. T. Jones, 10,000 trees; Gurr & Brewster, 5000 trees; F. V. Fagan, J. O. Lilley Co., Hearnthy & James, Hiley Bros., W. E. Warren, B. W. Sanford, Sterling Neil, H. A. Brown and J. G. Vischer, each containing between 3000 to 6000 trees. There is around Fort Valley not less than 1,250,000 young trees. There is also in the same county as Fort Valley the famous Rumph orchard, which until last year was the largest orchard in the world, containing 125,000 trees.

Most of the trees around Fort Valley are yet very young, yet the net profit to fruit-growers around this place this season was something over \$500,000. There will come to them from the sale of the trees \$200,000. The Hale Georgia Orchard Co. sold \$120,000 worth of trees this fall, and there are several other nurseries there.

The varieties usually grown in Georgia, given in the order of ripening, are: Alexandria, Tillotson, Early River, St. John, Early Crawford, Amelia, Stump the World, General Lee, Chinese Free, Belle of Georgia, Elberta and Late Crawford. There are some others grown here, and all do well, except perhaps the Alexander, which some are discarding. The main shipping points are Fort Valley, Marshallville, Or-

chard Hill, Griffin, Forsyth, Barnesville, Reynolds, Perry, Powersville, Loraine, Tennille, Butler, The Rock, Byron, Vineyard and Moreland.

It would, perhaps, be interesting to the readers of the *News and Courier* to know the profits derived from this fruit crop. Mr. W. E. Warren, of Houston county, whose land is about the average, realized \$300 per acre from his entire crop. I have before me an account of a sale made by Snow & Co. in Boston of 480 cases of these peaches sold at auction in the month of August which brought \$1,721.57 gross. This being in August, when the Delaware and New Jersey crops were on the market and also sold at auction, gives some idea of the demand for them. The usual price per crate of three pecks, however, is from \$3.00 to \$6.00. The cost to market is as follows: For crates in quantities, twenty cents; gathering, packing and loading cars, twenty cents; freight and refrigeration, fifty-eight cents; commission, ten cents—total, \$1.08 per crate. Taking the lowest price, \$3.00, this will net \$1.92 per crate. A tree will yield on an average about two and a-half three-peck crates.

Suppose we get some idea of what the profit of one of these farms will be. Take the Hale Georgia Orchard Co., owned by Messrs. J. H. & George H. Hale, of South Glastonbury, Conn. By the time these trees begin bearing they will have expended \$125,000. Their average crop will net them over \$500,000, which will almost thrice pay for their lands, etc. Suppose we figure on the profit per acre as compared with cotton. An acre in peaches will yield \$300 net. Suppose that we have a crop one year in seven—but more strictly speaking one in three—that will give a profit of almost \$43 per acre. Suppose cotton to be ten cents per pound, and that an acre will produce a half a bale or 200 pounds, this will give \$20 per acre, saying nothing of the cost of fertilizers, labor, etc. Does it not seem that the peach crop in South Carolina would pay better than cotton?

The canning industry is also receiving attention here, as well as the making of brandy from the inferior fruit.

The majority of these orchards, and especially the largest ones, are owned by Northern capitalists. There are, however, many Georgians and many who were formerly South Carolinians, among them Judge A. S. Giles, formerly of Abbeville, S. C.; Capt. Wesley Houser, Col. David H. Houser, Col. Frederick, the Posteles, and Frank Houser, of Orangeburg.

DURING February the Chattanooga Company, owners of the property formerly held by the Chattanooga Land, Coal, Iron & Railway Co., will put their electric railway in operation, giving connection between their property and the city. This is, it is understood, preparatory to further developments which will shortly be undertaken.

THE Newport News, Hampton & Old Point Development Co., of Virginia, owning extensive properties in the places named, recently declared a cash dividend of 7½ per cent. on its capital stock. The growth in these places has been quite rapid, and property owned by other development companies has greatly appreciated in value.

A BRICK famine is staring Chicago contractors in the face. This is due partly to the great demand, but the wet weather last spring prevented the yards from turning out the usual quantity; then again, the supply of brick which is generally received from Milwaukee, has been cut off by the vast amount of rebuilding there since the fire. The average price of brick is about \$5.50 per thousand, but now they are scarce at \$10.00, and everyone expects them to go to \$15.00 before spring. The outputs of all yards within a hundred miles of the city have been bought up by the contractors.

## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 471.]

## The News of Wall Street.

[From our own Correspondent.]

NEW YORK, January 3.

It has been a very dull and quiet week in the street, due to the holiday spirit on 'change, the absence of leading people from the business centre and the annual settling up of relations and taking account of the year's business and profits. There was a decided slump in Northern Pacific to mark the week with a feature, and the rise in Manhattan L. shares continued, the one as independent of the market as the other, each being moved by its own conditions and not affecting the general list. A better feeling in coal shares was also brought about, one cause being that earnings show that the anthracite roads are making a good deal of money; the other being that the Pennsylvania and its new and powerful rival, the combine, have come to terms on joint traffic rates.

\* \* \*

A feature that stands out among the railroad facts of the year is that railroads have earned in gross as much, or more than ever, while the proportion of expenses has risen abnormally, making the net result less than it ought to be. Now it is a certainty that the margin of profit in railway business has been steadily decreasing right along, owing to competition and to increased production, and consequently lower price for the merchandise carried, with other and less general causes. The competition effects have, however, been the most alarming, ever since the passage of an interstate commerce bill with an anti-pooling clause.

It will be a grave matter not only to the railroads themselves, but to those whose business depends upon them for transportation, if this tendency shall develop until there is no longer a fair profit in the carriage of crops and mining and manufacturing products. If the railroads are losing money, all hands suffer. If they lose it because they are obliged to do a great amount of business to make only operating expenses, trouble is sure to follow to their customers and dependents, the whole commercial body.

Pooling should remedy to a great extent this condition of affairs. There is so much business to be done and so many roads to do it. Whether we apply it to the trunk lines or the Western and Southwestern systems, or to the two or three roads feeding Pickettown and Beaverville, the effect is alike. It is better for all concerned that those roads get their traffic according to an equitable distribution at living rates than that the weaker ones should be compelled to hustle for it by making lower rates and demoralizing not only their own business, but that of their rivals. If the Congress shall not see its way to grant the legitimate demand of the railroads after years of experience under the interstate law have proven the evil effect of the granger idea, the railroads can operate under a pooling plan which no court or investigating committee can break down, as the laws and their interpretation now stand.

Combination with the idea to control! We have been afflicted with many newspaper hysterics on this subject for a long time, but there is growing to be less and less of it, and senseless clamor will soon cease as the public realizes that great enterprises have their support on public patronage and that both are interdependent.

\* \* \*

The prospects for the new year form the general topic of Wall street talk this week. Business, it is agreed, is good and on a solid and conservative basis. The fact that there were fewer failures than for years had a tremendous effect when it was

emphasized at the end of the year. The very fact that the railroads are doing larger business had also a noticeable recognition. That 1893 should be a remarkable year for prosperity is generally admitted. Apprehension of a cholera panic to spoil our World's Fair business is present, but there seems to be no great cause for alarm. Our health officials have been strengthening every weak point ever since the plague was stamped out at the gateway of America, and whether the national or State quarantine idea shall prevail, vigilance and efficiency at every point is expected and promised. Cholera, to us a greater danger than it really is, is more lightly regarded in Europe, which traffics more with cholera-infected countries in a year than we do in a decade. The year starts in with business well in hand, and with the gold-at-a-premium scare well worked out, most people finding it a cause for congratulation now that we have been able to stand an addition of silver to our currency, until over a billion dollars of the white metal, or the paper calling for it, is well maintained by our public credit and the people's absorption of it. At the outset of '93 we are able to congratulate ourselves upon being in better shape than all Europe. Even England has not yet gotten back where she was before the Argentine crisis, and every country abroad is distinctly poorer than at the beginning of 1892, except America. With the golden flood of sovereigns and reichsmarks and francs and lire coming into America, with the World's Fair alone we should be happy. Merchants are predicting a larger foreign trade than ever, independent of that.

\* \* \*

An important market feature of the recent few weeks of Wall street disturbance and uneasiness has just made itself prominent. At every decline there have come into the street a class of shrewd investors called "panic birds." They come when stocks are down and take them out of the street. I saw a man in a banker's office last week who hadn't been about in months. He took 1000 shares of a particular stock to his tin box in a safe deposit vault. It shows a profit of over \$5000 now, but he has bought it to keep, not to sell. The "outside public" (street parlance), meaning the people who put up margins, are out in larger force than I have observed for a year. Their attention is less centred on the industrials now, and railway shares are looking up from their neglected state.

\* \* \*

President Hood, of the Western Maryland Railroad, is reported as saying: "Our greatly improved earnings are largely due to the operations of the Potomac Valley Railroad; that is, the increasing net earnings are mainly derived from the heavy and rapidly increasing through business now being interchanged between the Baltimore & Ohio, Norfolk & Western and Philadelphia & Reading roads through the medium of this company's lines. The gross earnings for October, 1892, show an increase of \$30,714.99 over October, 1891. The gross earnings for October and November, 1892, were \$193,106.33, operating expenses \$132,089.61, net earnings \$61,016.72, as compared with gross earnings \$147,099.23, operating expenses \$112,369.38 and net earnings \$34,729.84 for October and November, 1891, showing an increase for the two months of \$46,007.10 in gross earnings, \$19,720.23 in operating expenses and \$26,286.87 in net earnings, to be increased by the actual figures for November when received. Of course this extraordinary showing is much in excess of what can be depended upon during the lighter months."

The 651-foot railroad bridge across the Tennessee river at Knoxville, Tenn., under construction for the Marietta & North Georgia, will soon be finished.

## Railroad Earnings and Expenses in 1891-92.

The statistician of the interstate commerce commission has prepared a preliminary report on income and expenditures of railways for the year ended June 30, 1892. The gross earnings of 128,349.99 miles of railway are shown to have been \$951,025,159, from which the gross earnings of the entire railway system are estimated to have been \$1,222,711,698. This is an increase of \$125,950,303 over the earnings of the previous year, or an increase of \$608 per mile of line. The operating expenses for the year were \$814,752,082, being an increase of \$82,834,189, which leaves an increase in net earnings of \$45,116,114. The actual increase in revenue from passenger service was \$31,500,038, or \$247 per mile, as against an increase in the revenue from freight service of \$91,506,671, or \$349 per mile of line.

The largest increase in gross earnings per mile of line is made by the lines connecting the wheat-growing districts with the seaboard and the lines in the Southern States bordering on the Gulf of Mexico. These railways, however, show increases in operating expenses nearly equal to the gain in gross revenue, and but little advantage has been obtained by the improvement in gross earnings.

The report shows that the aggregate gross earnings of sixty-two roads, each of which enjoys an income in excess of \$3,000,000, is \$794,478,631, being an average income of \$12,814,171. The average gross revenue per mile of line for all roads is \$8840. A classification of the sixty-two roads in question shows that eight receive each an income in excess of \$20,000 per mile of line; for ten the income per mile of line is between \$13,000 and \$20,000; for thirteen the income per mile of line is between \$7443 and \$13,000, while the income for each of the remainder is less than \$7443 per mile of line.

The figures given by the report relative to the passenger and freight traffic covering those roads whose gross earnings exceed \$3,000,000 evidences a healthy expansion of trade during the past two years in some parts of the country. In other parts the loss of traffic in 1891 is more than made up by the increased business of 1892.

In the Southern Gulf States, Tennessee and Kentucky the ton miles per mile of line were in 1890 394,096; in 1891, 405,905; in 1892, 499,926, showing a permanent gain. On the other hand, in the territory of the trunk lines east of Buffalo and Pittsburgh the ton miles per mile of line were in 1890 1,900,295; in 1891, 1,763,330, and in 1892, 1,935,404. The poor relative showing of 1891 is in part accounted for by new lines built in the State of Pennsylvania, but the figures indicate a decided fluctuation in business.

## Rolling Stock as an Advertising Medium.

The business men of Pensacola, Fla., are raising a fund of \$100,000 to secure a new railroad—the Pensacola, Alabama & Tennessee. The canvass for subscriptions developed the form of a most unique offer, an appreciation of the art of advertising, that is decidedly refreshing. Were it not that the proposition appears to be in good faith, it would prove a most acceptable contribution to midwinter humor. It is as follows:

A certain firm will donate the sum of \$10,000 towards the enterprise, to be paid in cash upon the completion of the railroad from Pensacola to Memphis, upon the condition that all the employees of the said railroad be required to purchase their uniforms and overalls from the said firm; that the latter's advertisement be painted upon all the rolling stock of the railroad company in a manner to be directed by themselves or their agents; also that the

general officers, stockholders and bondholders of the said railroad company, and all employees of said company who are not required to wear uniforms, shall have their clothing made to order and purchase all their furnishing goods, etc., from the said firm.

## Progress of the Coal River Railroad.

Readers of the MANUFACTURERS' RECORD will remember an article, printed some time ago, describing the manner in which a number of land owners in West Virginia proposed to build a railroad something over fifty miles in length through their lands along Coal river. The plan was for each land owner to give a certain number of acres to a construction company for the construction of the road. This plan was considered rather visionary at the time, but developments show that it has worked out very nicely.

On Saturday, December 31, a meeting of land-owners along the proposed line of the road was held at Charleston, W. Va., for the purpose of considering a proposition made by Col. J. S. Casement, of Painesville, Ohio. General Casement's proposition is that he will build the line for a distance of fifty miles in consideration of 500 acres of land for each mile of road, or 25,000 acres for the entire line. He further stipulates that he shall have from now until the first of next July to examine the land he is to take as his share, and if found to be as represented, he will at once begin work. This proposition was acceptable to the promoters of the road and the agreement was made with the stipulation that they should have the privilege of taking any more acceptable offer made between now and the 1st of July, 1893. General Casement agrees, if his proposition is accepted, to have at least twenty miles of the road completed by the 1st of July, 1894.

Among the land-owners present at the conference were: Dr. W. R. Pryor, of New York, son of Judge Roger A. Pryor, whose representative he is; Dr. W. D. Byrne and his son, John D. Byrne, also of New York; John McClintic, of Lexington, Ky.; Major A. St. Clair, of Graham, Va.; Governor A. B. Fleming, of West Virginia; Governor-elect William A. MacCorkle, of West Virginia; and Major J. C. Alderson and Major Thomas L. Broun, of Charleston, W. Va.

Fifteen thousand acres of land have already been subscribed to the project and a committee was appointed at the meeting to secure the remaining ten thousand. The route of the road is from the mouth of Coal river at St. Albans, to Boone Courthouse, on Little Coal river, and to Peytonia on Big Coal river. From St. Albans to the forks of Coal is fourteen miles; from the forks to Peytonia is, approximately, the same distance, and from the forks to Boone Courthouse is twenty-two miles.

The road will open up what is known as the Coal river basin, which contains 1000 square miles of as fine coal and timber land as is to be found in the United States. There is a vein of cannel coal from three to four feet in thickness underlying almost the entire region. Beside this, there are three or four other workable seams, among which is the celebrated Black Band vein, which commands a better price than almost any other bituminous coal on the market. At some places along the line the vein reaches a thickness of thirteen feet.

The projectors of the road mean to make it entirely independent, both in construction and operation, of all other railways, though it will connect with the Chesapeake & Ohio and Kanawha & Michigan at St. Albans.

## Railroad Notes.

THE Richmond Terminal again came into notice by the recent action of Judge Lacombe, of the United States Circuit Court at New York, in appointing Frederick W. Huidekoper, of Washington, and



Robert Foster, of Baltimore, as receivers for that company in the State of New York. They were previously appointed by the Virginia court.

THE following recent changes have been made among the officials of the Yazoo & Mississippi Valley branch of the Illinois Central: Mr. J. F. Wallace has been appointed chief engineer, with headquarters at Chicago. Mr. A. W. Sullivan has received the appointment of general superintendent of the Yazoo & Mississippi Valley at Chicago. The office of superintendent of roadway, up to the present time held by Dr. J. B. T. Hillhouse, has been abolished so far as the Yazoo & Mississippi Valley road is concerned. Mr. A. Philbrick has been appointed roadmaster of the Louisiana division of the Illinois Central and branches, with headquarters at New Orleans, vice T. J. Ansley, resigned. These appointments were effective January 1.

THE Jacksonville & Atlantic Railroad, which was lately purchased by M. W. Drew, will be operated by a newly-formed corporation, the Jacksonville & Atlantic Railway Co. The road is seventeen miles long, extending from Jacksonville, Fla., to Pablo Beach. The new company is officered as follows: M. W. Drew, president; J. W. Archibald, vice-president; B. P. Hazeltine, treasurer, and W. A. Macduff, secretary.

THE well-known policy of the Chesapeake & Ohio management of keeping the efficiency of that system up to the top notch is illustrated in the steady improvement of facilities to satisfactorily handle the continued growth of traffic. The company has now in operation about seventy miles of double track, and it is its determined purpose to continue increasing this at the rate of about forty or fifty miles a year until its road between Huntington, W. Va., and Clifton Forge, Va., is completely double-tracked.

It is calculated that over \$50,000,000 have been appropriated by the various railroads entering Chicago to be expended for improvements in terminals, betterments and new equipments in anticipation of the heavy volume of business incident to the World's Fair to be held this year.

THE Baltimore & Ohio has practically secured a long-wanted connection into central Pennsylvania by the arrangement for broad-gaging the Baltimore & Lehigh between Baltimore and York, Pa., a distance of seventy-five miles, recently made. The Baltimore & Lehigh has engaged to use the B. & O.'s belt line and to interchange traffic with that company.

AN order for the appointment of a receiver for the Chattanooga Construction Co., of West Virginia, is contained in a recent decision by Judge Key, of Chattanooga, Tenn. The receiver is to take charge of the company's assets and apply them to the payment of its debts. This company was the builder of the Chattanooga Southern Railroad, which is also in the hands of a receiver.

THE Charlotte Harbor division of the Florida Southern Railroad, extending from Bartow to Punta Gorda, is now of standard gage. That portion between Arcadia and Punta Gorda was changed from narrow to standard gage on December 17, 1892.

A TALKED-OF move on the part of the Atlantic Coast Line is the severance of its connection with the Plant system for Florida business and an arrangement for such service with the Florida Central & Peninsular on the completion of the latter's extension to a connection with its South Bound branch.

THE sale of the Atlanta & Florida Railroad, which is advertised for a date in February under foreclosure proceedings by the Central Trust Co., will be resisted by the receivers' attorneys. It is claimed that

the United States court has no right to order the sale of the property while it is in the hands of the State court.

THE Louisville & Nashville dividend is to be declared soon. It is believed that the company is in a position to pay an increased dividend; however, 2 per cent. cash is assured.

#### A New Upper Monongahela Mine.

The Virginia & Pittsburg Coal Co. has opened and equipped one of the most complete mines in the Marion county, W. Va., region, at a point about two and a-half miles from Fairmont. The company owns a tract of 1102 acres on the west side of Tygart's Valley river, underlaid with the Pittsburg seam. The coal is about six and a-half feet thick, and is a solid body underlying the entire tract. The main opening has been driven in over 200 feet, and rooms are opened off from this entry on both sides at close intervals. The coal is covered by a splendid stone roof that is easily supported, and from the very mouth of the pit the coal shows a splendid peacock ornament on the bright black. The company will open one or two more entries and will connect them all when the workings have progressed far enough to make it possible. The mine is located on the opposite side of the river from the railroad, and the question of how to reach the shipping facilities without the expense of building a bridge was a question that bothered the proprietors for quite a while and hindered the beginning of operations for a time. It was finally decided to use a cable tramway system and such a plant is now in use. The distance is 590 feet, and 1000 pounds of coal is carried at a load and dumped automatically into the screening chutes over the railway sidings. Foundations have been begun for a string of fifty coke ovens in connection with the plant.

#### Leases in the New River Coal Field.

Since the publication in the MANUFACTURERS' RECORD last week of the article entitled "Development of the New River Coal Field," action has been taken which makes this field one of the most interesting to coal men and those who watch Southern development. At the time that article was written the sale had barely been consummated whereby the Vanderbilt interests became possessors of several large bodies of coal land in what is known as the New river (W. Va.) region. Since then negotiations have been set on foot whereby no fewer than thirty concerns will lease blocks of coal land from the new purchasers and begin the development of the coal and coke industry along the Chesapeake & Ohio Railroad.

Major J. W. Gordon, secretary of the McClure Coal & Coke Co., of Pittsburg, which company is largely interested in the field, and Mr. Thomas McKell, the former owner of the land, with their attorneys, have been in Charleston, W. Va., for a week perfecting the titles and boundaries of the land preparatory to making the final transfer. Already arrangements have been made for leasing the land in suitable sized tracts to those who are to develop it. The leases will be made through Mr. Thomas Dannelly, president of the McClure Coal & Coke Co. Among those who have either applied for leases or who are making examinations preparatory to doing so, are Stonington McDonald, manager of the Great Kanawha Coal Co., of Mount Carbon; the Belmont Coal Co., of Crown Hill; J. A. McGuffen, of Sewell, manager of the Longdale Iron Co.; G. H. Caperton, manager of the Fire Creek Coal & Coke Co.; Patterson Bros. & Co., of Piketon, Ohio; M. M. Warren Cott, of Pittsburg; A. Rinehart, of Covington, Va., and several others, who are represented by attorneys. It is understood that the lease

rate will be ten cents a ton for the coal mined, the land owners to have access to the mines to see that coal is removed in the most advantageous manner. The coal veins under the McKell land average six feet throughout, which is nearly two feet greater than the average thickness of the seams now worked along the main line of the Chesapeake & Ohio. The rate paid for mining at present is fifty cents a ton, but it is thought that miners can earn as much money at forty cents in the thick vein and that such a rate can be established.

About the only matter for further consideration before leases are closed and the actual work of opening the mines is begun is the rate of freight that will be charged by the Chesapeake & Ohio road from the New river region to the various markets. Representatives of those who contemplate leasing the land and of the Chesapeake & Ohio Railroad held a meeting in Cincinnati on last Saturday to discuss the question. The coal operators presented an estimate of the cost of getting the coal loaded on the cars at the tipples, and the probable price they could secure for the product delivered. The representatives of the railroad company are said to have shown an inclination to act with absolute fairness, and no difficulty is contemplated on this score. In the meantime the Chesapeake & Ohio road is pushing its double-tracking in West Virginia, and is making every effort to get its Western and Northwestern outlets ready at the earliest day.

It has come to the surface since these negotiations were begun that the mere matter of coke-making is not the only one that has moved coal operators to enter the New river field. It is said that this coal, when burned under proper conditions, is almost smokeless, and that it brings quite a little premium in several cities on that account.

#### Coal and Coke Notes.

THE Chesapeake & Ohio Canal, which is now closed for the winter, has had a most successful season during the past year. Nearly 200 boats were kept in operation and over 270,000 tons of coal shipped. The coming year is expected to do even better than this, as a larger number of boats will be put on.

THE Western Coal & Mining Co., of St. Louis, Mo., has purchased coal and mining rights in about 4000 acres of land in Franklin county, Ark., and the sinking of a large shaft is now in progress.

THE exports of coal from the port of Norfolk, Va., from January 1, 1892, to December 30, 1892, as cleared by Wm. Lamb & Co., agents at Lambert's Point, is as follows: Foreign exports 2890 tons and coastwise 33,969 tons; total for week ending December 29, 36,859 tons. The total amount for the year ending December 29 was 1,640,199 tons.

MESSRS. A. A. BERGER, of Baltimore, and R. G. Banks, of Florence, Ala., have purchased valuable coal lands in Jackson county, Ala., on the Tennessee river, and will open mines.

#### Savannah's Sea Suburbs.

By Col. J. W. Avery.

The lovely sea islands and coast resorts of the sunny South, with their comfortable enchantments, are winning the warm favor of the Northern luxury-loving millionaires, and none of these attractions surpass the ocean suburbs that environ and enrich Savannah.

The wealthy weather epicures of the cold climates of our comprehensive Union are beginning to find it a welcome change from the frigid winters of their snowy homes to the mild air and varied charms of our delightful Georgia coast islands, that with a soft temperature afford to the sportsmen the pleasures of the hunter and the fisherman.

These enchanting sea islands were in the

baronial days of slavery the property and homes of gentlemen of wealth and taste, who lived in cultured ease in their elegant dwellings, set off by ornate grounds, and dispensed royal hospitality to hosts of congenial guests.

The war desolated rudely these princely places and left them wrecked sites of olden splendor, rich in the vestiges of former comfort and magnificence. They have fallen in the stern poverty of the times into a forlorn forgetfulness and a sad decadence, shorn of their glory and depreciated in value.

But the renaissance has begun. Attracted by the myriad native beauties of these favored spots, the luxurious capitalists of the North have bought and converted them into fashionable resorts, with all the handsome paraphernalia of brilliant improvements, beautiful gardens, smooth drives and commodious modern clubhouses, with every convenience for comfort and pleasure. And these places are equally pleasant in summer or winter, the sweet temperature prevailing pretty fairly the year round.

Of Savannah's sea suburbs Tybee is different from all the others. It is a modern resort—a since-the-war product—the creation of recent enterprise and later-day thought. It has no old social repute. It made historic fame in both the revolution and the late civil war, and it has been developed in the past twenty years into the chief South Atlantic sea watering place, and linked by rail to the Forest City, to which its value will constantly grow.

Wilmington and Warsaw islands are both very popular resorts and being rapidly improved into most attractive and well-equipped suburban spots, the first by the Wilmington Island & Thunderbolt Ferry Co., and the latter by Mr. J. H. Parsons, of New York. Ossabaw island has had much money spent upon it, among others by the famous and solid bookmakers of the American continent, the New York Harpers. Another Ossabaw developer is the Connecticut Waterbury, of the known New England town of that name.

Another private island suburb of Savannah is St. Catherine's island, the possession of that accomplished gentleman and successful business man, Mr. J. Raders, the German consul at Savannah, who has made the island one of the charming retreats of the South Atlantic coast, with elegant dwellings exquisitely furnished, commodious stables of fine horses, broad pastures of choice cattle, rare fishing streams, wide hummocks full of game for the sportsmen, a deep and smooth sea beach and a community of 100 employees in their tasteful cottages.

What words can tell the glory of the far-famed Bonaventure, the most impressive and beautiful "city of the dead" in the world, whose funeral avenues of antique, moss-draped massive oaks—poetic emblems of nature's ceaseless, sorrowful weeping—baffle description. The place is a typical cemetery, august and solemn. Its very appearance suggests mourning, and its atmosphere incarnates bereavement. Bonaventure is a sepulchral wonder of nature's own creation.

Thunderbolt, Isle of Hope, Montgomery, Beaulieu, Bethesda (home of orphans), Greenwich Park, White Bluff and other picturesque and captivating suburbs, reached by electric railways, each with its own uses, merits and beauties, can be named in Savannah's surpassing environment of historic and exquisite outlying provincial tributaries, Edens of salt water and fresh ocean breeze, of noble forest and glistening stretches of white, smooth seashore, spots of scenic loveliness and exhilarating enchantment.

It is a practical testimony to the charms of these rare environments that direct trade is bringing the English lords and gentlemen to hunt a new Italy for their yachts and elegant leisure, which they have found here.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on page 470.]

## Southern Lumber Notes.

THE large schooner Charles Davenport, registering 1,235 tons, was receiving railroad ties at Brunswick, Ga., on December 29. She was expected to take a cargo of 32,000.

F. E. TOWNS, of Tallahassee, Fla., a prominent lumber exporter from Brunswick, Ga., will ship during the year 1893 at least 30,000,000 feet of lumber from that port.

THE Beaumont Lumber Co. is putting in a new slab conveyor, which, when completed, will be the most substantial apparatus of the kind in the South.

THE Hooks Lumber Co., of Hook's Station, Texas, on the S. E. T. road, are preparing to put in a steam train for hauling logs to their mill. Several cars of rails have been received by the company.

THE Montreal Manufacturing Co., a new concern just organized, will erect an extensive furniture factory at Montreal, a suburb of Atlanta. The plant will consist of a building three stories high, 175x55 feet in size, with an annex two stories high and 150x50 feet in size. The officers of the company have been chosen, as follows: Clement A. Evans, president; Thomas Kirke, secretary, and J. H. Porter, treasurer.

THE new lumber mill of the Tyler Car & Lumber Co. at Michilli, Texas, has been started up. It cuts about 125,000 feet of lumber daily.

THE saw mill at Pelican, La., will be considerably improved by Jas. E. Bailey, of Atlanta, Texas, who has purchased it. The mill will cut 20,000 feet daily.

MESSRS. W. L. RANKIN & BRO. will build a planing plant near Fayetteville, N. C., and has already purchased outfit of machinery.

MESSRS. CHAPMAN & WILSON are remodeling their planing mill at Wheeling, W. Va., and will put in an entire new outfit of machinery to take the old equipment's place.

THE Clarendon Lumber Co., of Clarendon, Ark., was incorporated on December 30 last. The capital stock is placed at \$50,000. The officers are F. S. Ellis, president and treasurer; P. J. Wilden, vice-president, and George Spencer, secretary.

THE Norwood & Butterfield Co., at Norfield, Miss., is improving its plant. New flooring machines will soon be purchased and added.

It is said that Messrs. Nicola Bros., of Pittsburg, Pa., have purchased an extensive tract of timber land in Roane county, W. Va., and intend erecting a fine sawing plant at Spencer.

THE new bent-wood works at Anniston, Ala., have been completed and operations have commenced.

MESSRS. KRANSON & CASPARI contemplate adding a new shingle mill to their lumber plant at Natchez, Miss.

MESSRS. ENOCH BROS., of Magnolia, Miss., intend to make some mill improvements soon, including remodeling and the addition of a gang saw.

WORK is progressing rapidly on B. E. Brister & Co.'s new lumber mills at Bogue Chitto, Miss., and will be completed in a couple of months.

THE new ten-block shingle machine lately put in by the Bemis Lumber Co., of West Melville, La., is giving fine satisfaction.

THE Sulphur (Texas) Lumber Co. is adding a fine new dry-kiln to its plant.

THE E. P. Allis Co., of Milwaukee, Wis.,

will supply a complete band saw mill of 40,000 feet capacity daily for the E. E. Jackson Lumber Co. at Plantersville, Ala.

H. C. STRINGFELLOW's fine mill at Shreveport, La., was destroyed by fire on the 18th ultimo, causing a loss of \$60,000. Doubtless he will soon rebuild.

D. B. BARBOUR, J. W. Minnick and A. J. Miller have purchased Power & Co.'s planing mill in Roanoke, Va., and will improve and operate it. The purchase price was \$75,000.

## New York.

OFFICE OF MANUFACTURERS' RECORD,  
No. 126 Liberty Street,  
NEW YORK, January 3.

The extreme cold weather, together with the holiday season, has had a tendency to somewhat hinder trade, which is not very brisk, anyway. There is nothing of startling importance to communicate to the lumber world.

The conditions concerning yellow pine seem to be incapable of changing. Its friends here, that is to say, its real friends, look to the organizations which have recently taken place in the South with much favor, and really and truly hope that, through this, the conditions may be so much improved that the manufacturers will be able to get, at least, a living out of it. Prices have not advanced in this market, nor is any advance anticipated in the near future.

Building orders, 12 in. and under.....	\$19 50/100	20 00
" 14 in. and up.....	20 00/100	21 00
Yard orders, random.....	17 00/100	18 00
Ship stock, 40 ft. average.....	22 00/100	23 00
Heart face siding, 1 and 1 1/2 in.....	18 00/100	19 00
1-inch wide boards.....	22 00/100	—
1 1/2 and 1 3/4-inch wide boards.....	23 00/100	—
Kiln-dried sap.....	15 00/100	16 00
Rift-sawn flooring, rough cargo lot, 36 00/100	36 00/100	38 00
" tongue and grooved, in carload lots.....	40 00/100	—

The North Carolina pine trade is in very good shape. It is safe to say that the North Carolina pine manufacturers wound up the year with a balance on the right side. Demand is good and all stock in sight is readily disposed of.

West Virginia spruce is gaining a foothold in this market, and is meeting with much favor. Some of its enemies would like to carry the idea among those who don't know that this spruce is not equal to the Eastern article, but, gradually, the dealers are finding out for themselves that this is all humbug, and that West Virginia spruce is as good as any spruce that ever grew, and so the orders are more freely given than has been the case heretofore. It rules in price about about a half a dollar a thousand higher than the Eastern article, but dealers are willing to give this, as they can order it in sizes exactly to suit.

Mr. Seymour, of whom we made mention in a previous article, has perfected arrangements for an exhibit of cypress at 18 Broadway, adjoining the offices of the New York Lumber Trade Journal. It is intended by this to show the architects the merits of this valuable wood by inviting them to a personal inspection, and it is hoped this will lead them to call for it in their specifications.

The hardwood trade is not brisk.

Holders of poplar are very stiff. They do not intend to let it go at the old prices, but buyers seem to hold back, the general opinion being that the recent tides will furnish a supply which will again tend to reduce prices. Many of our wholesalers are looking forward to the convention at Cincinnati, and wondering if the magnates will change their inspection rules to conform with common sense. The present rules, recently adopted, are considered more of a joke than as something to be governed by.

Quartered oak is about as we stated in our last issue. There is a demand for cargo lots.

Quartered oak.....	\$19 50/100	20 00
Thicker.....	50 00/100	53 00
Common.....	35 00/100	38 00

Plain oak is without change. Inch and a-quarter is in demand, and thick lumber

which is dry is readily disposed of, but there does not seem to be much call for one inch.

PLAIN OAK.....	\$35 00/100	36 00
1x8 inch and up.....	36 00/100	38 00
1 1/2 and 1 3/4 inch.....	37 00/100	39 00
2 inch.....	37 00/100	39 00
Export oak.....	32 00/100	34 00

The call for quartered sycamore is somewhat improved. Ash holds its own, and is in demand for good, dry stock.

ASH.....	\$35 00/100	37 00
1 inch.....	37 00/100	40 00
1 1/2 and 2 inch.....	38 00/100	41 00
2 1/2, 3 and 4 inch.....	22 00/100	24 00
Common.....	22 00/100	26 00

The demand for elm is continually increasing, and stocks are comparatively light.

Other conditions remain as last stated. This is the first letter we shall write for you this year, and we close it with feelings of satisfaction, believing that there are better times ahead, and so we wish all the readers a happy new year.

## Memphis.

[From our own Correspondent.]

MEMPHIS, TENN., January 2.

The past week has been a very dull one in the lumber business. The holidays, the shutting down for taking account of stock, combined with the bad, stormy weather, has pretty well closed out all outdoor work or shipments.

The year closes on a very satisfactory condition of affairs both in local and shipping lines of the lumber trade. The associate branches, including boxes, baskets and woodworking concerns, generally have all passed a very satisfactory year. The local stocks in the yards have gotten pretty low as to both quantity and quality, but there is an abundance at the mills which are controlled here, so that there is no delay or embarrassment in filling orders.

There have been no failures in the lumber firms here and but one change, the sale of the Memphis Lumber & Manufacturing Co. to A. W. Robinson. There has probably been an increase in the milling output of this territory of at least 20 per cent, during the year now past, additions both in new plants and in increase of the old concerns in their plant and machinery.

A delegation has been here for two or three days past representing the car works at Litchfield, Ill., which is preparing to remove its plant to some point in the South and enlarge the works. They were taken in charge by the president and secretary of the Young Men's Business League, and shown the varieties of timber and other inducements, and will, in all probability, decide to remove their plant to this place or to some point on the lines of road centering here and within the contiguous territory. They will employ at least 1000 hands, including all grades of workers. The wooden butter-dish folks have decided to come here and build their factory.

Some parties in Adams county, Miss., have formed a cottonseed-oil-mill company and will build a mill at Foster's Mound, a point seven miles from Natches, on Natches & Jackson Railroad.

Among the visitors at the office the past week was Whyte Bedford, of Lake Cormorant, Miss., who has a 20,000-a-day mill there, cutting about two-thirds of it in gum and the other third about equally divided between cypress and oak. He ships mostly to Chicago parties. He says that he has pretty well cut out the land he controls and is seeking a new location for his plant. C. C. Mengel, Jr., of the heavy Louisville hardwood house of Mengel & Bro., was in looking after some contracts. He was feeling well over the result of a suit of Brown against them for \$10,000 for a leg shattered in their mill, in which for the first time in fifteen years a jury failed to decide against the mill-owner. He said that poplar was about exhausted and stumpage ruled much higher, and prices must go up; white quartered oak, demand lighter; plain red, higher in price; red

quartered was overstocked. He thought the general outlook for 1893 was good and the promise bright. He made a contract here for 800,000 feet of sycamore. J. W. Buster, who is just starting a mill at Riverside, Ark., of 10,000 cypress a day, was here to make contract for the output.

There are a number of new enterprises in hand which will undoubtedly materialize in a few days, and the new year opens with good promise.

There is no change to note in prices, which, while being strong, are just where they were in January, 1892.

BLACK WALNUT.....	\$65 00/100	70 00
1st and 2d, 1, 1 1/2 and 2-inch.....	35 50/100	40 00
Common.....	30 00/100	34 00
Counter tops.....	90 00/100	110 00

ASH.....	24 00/100	30 00
Common.....	12 00/100	14 00

CYPRESS.....	22 00/100	24 00
1-inch, 1st and 2d clear.....	24 00/100	26 00
1 1/2, 1 3/4 and 2-inch.....	24 00/100	26 00
Fencing 1x6, 16 feet.....	15 00/100	16 00

POPLAR.....	24 00/100	25 00
1-inch, 1st and 2d clear.....	26 00/100	28 00
1 1/2 and 2 inch, 1st and 2d clear.....	14 00/100	16 00
Dressed, 1 1/2 & 2-in., 1st & 2d clear.....	28 00/100	30 00
Common dressed, 1-inch.....	16 00/100	17 50
Squares.....	22 50/100	26 00

COTTONWOOD.....	9 00/100	12 00
1 to 3-inch mill run, culls out.....	12 50/100	16 00

RED GUM.....	16 00/100	20 00
Common and culls.....	8 00/100	10 00

OAK.....	24 00/100	26 00
1 to 4-inch, 1st and 2d.....	13 00/100	15 00
Common, 1 and 2-inch.....	30 00/100	32 00
Quarter oak, 1-inch, 1st and 2d.....	34 00/100	36 00
Quarter oak, 1 1/2-inch and up.....	—	—
White \$1 higher.....	—	—

YELLOW PINE.....	18 00/100	20 00
1st and 2d, 1 1/2 and 2-inch.....	25 00/100	30 00
Dressed.....	17 50/100	—
Flooring, 5 and 6 d and m.....	17 50/100	—
Flooring, 3 and 4 d and m.....	15 00/100	17 50
2d flooring.....	27 50/100	—
Heart step lumber.....	17 50/100	20 00
Ceiling, 1st and 2d, 3/4, 3/4 and 1/2.....	16 00/100	—
Ceiling, 1st and 2d, 3/4 and 1/2.....	—	—
Common f. o. b. Memphis.....	—	—

Car lots.....	12 50/100	—
POPLAR (LOCALS).....	6 00/100	10 00
Cypress.....	6 00/100	9 00
Cottonwood.....	3 00/100	4 00
Gum.....	3 00/100	4 50
Oak.....	6 00/100	12 00
Ash.....	8 00/100	13 00
Black walnut.....	15 00/100	50 00

SHINGLES.....	3 00/100	—
No. 1 heart cypress, 16-inch.....	2 25/100	—
No. 1 sap, 16-inch.....	—	—
LATH.....	2 00/100	2 75
Cypress.....	—	2 50
Pine.....	—	2 10

It is reported that a syndicate of American capitalists have secured control of the island of San Domingo by purchasing the right to collect the revenue and customs of the country, which are derived principally from tobacco growers. The price paid is, it is said, \$3,500,000. If this be correct it will give the United States a harbor and coaling station at that point.

THE Suwanee Canal Co., which is cutting a canal through the Okefenokee swamp, in Florida, has advanced well in its work, and the entire distance, twenty-five miles, will probably be completed by this coming March. The canal follows a straight course from one side of the swamp to the other, and will be fifty feet wide and from eight to ten feet deep. The company owns about 300,000 acres of land in the swamp, and when it has been drained by the canal an effort will be made to put it under cultivation.

A PLAN is afoot for the organization of a strong stock company, having for its purpose the construction of a dam across the Rio Grande river above El Paso, Texas, for irrigating purposes. A number of capitalists of New York city and Albany, N.Y., are interested in the scheme, and Mr. Gaylord Logan, of Albany, their representative, has been on the ground during the past two weeks investigating. He expresses himself as satisfied with the feasibility of the enterprise and the wisdom of investing in it. The work would cost about \$2,500,000, and would require over a year for its completion. The company will organize at El Paso under the name of the International Dam & Irrigation Co., and the following gentlemen will compose the first board of directors: Messrs. Gaylord Logan, Wilson Hamilton, E. C. Roberts, Solomon Schulz, B. Salazar, Phœbus Freudenthal and J. H. Riley.



## IRON MARKETS.

## Philadelphia.

[From our own Correspondent.]

PHILADELPHIA, January 4.

The new year finds the iron trade in about the same condition as noted during the closing weeks of December. Many of the large consumers of pig iron which closed down during the holidays for repairs or stock-taking have not resumed active work yet, so that the demand during the week has not been of sufficient proportions to enable anyone to gauge the exact condition of the market. The furnaces are believed to have accumulated stock during the past month, but not to a greater extent than was expected in view of the decreased consumption. What buying has been done was of the usual hand-to-mouth character, purchasers refusing to entertain any orders for material in excess of immediate wants. There is an absence, however, of any decided pressure on the part of the furnaces to stimulate buying by concessions on quoted rates, although there are isolated instances of sales of off-grade irons at slightly lower prices. Consumers' yards are generally bare of stock, and some of the foundries which made contracts in October and November for supplies to carry them into the new year will soon be in the market again, so that an increased demand is looked for before the close of the month. It is not expected, however, that prices will show any considerable change from those now in force. Manufacturers seem to recognize that the earlier part of the year at least will be a period of low prices, and are therefore considering closely the question of cost to manufacture in order to meet the competition of other sections and hold their trade. For the present quotations are firmly maintained as follows for good grades of iron at tidewater or its equivalent, with the usual concession on orders for Southern iron at points 100 miles west and south of here:

Standard Pa. No. 1 X.....	\$15 00/60	15 25
" No. 2 X.....	14 00/60	14 50
" Forge.....	13 00/60	13 50
Southern coke No. 1 foundry.....	14 25/60	14 75
" No. 2 ".....	13 50/60	14 00
" gray forge.....	13 00/60	13 25

## Wheeling.

[From our own Correspondent.]

WHEELING, W. VA., January 4.

The new year has begun, but it has not progressed far enough to give any indication as to what kind of iron and steel history it will make. As yet all finishing mills are idle, taking stock and making repairs. This is likely to continue for a week or two longer, and the time of resumption will be very largely governed by the demand at that time. Business is still considerably stagnated and consumers and small dealers are giving more attention to their annual settlements than to pushing new business. This condition is liable to continue to the middle of the month, but after that time a general reaction toward something better is confidently expected.

The idleness of the finishing mills has a tendency to create an oversupply of pig iron, and this in turn will likely enforce lower prices. Nearly all the furnaces in operation are getting stock ahead and are anxious to sell. Only a few of them are working on contracts made last year. The present dullness almost entirely removes from the situation the probability of more furnaces blowing in, which is that much gained at least. Prices are fairly well maintained in spite of this dullness, and a fall of five cents a ton is all that can be noted in the price of best quality mill iron since the last report. It is not likely, though, that furnacemen will haggle over a few cents a ton when their stock-yards begin to fill up.

One sale of 500 tons and another of 400 tons of mill iron at \$12.45 is reported this week, and it is stated that another buyer offered to take 500 tons at \$12.40. This

last offer was refused, though the refusal is explained by the fact that the furnace to which it was made is one of the very few that are not hunting business just at this time.

Bessemer pig still seems to be on the down grade, and \$13.75 is the highest price heard of in connection with it. Foundry irons continue to be in fairly good demand, the midwinter repairs of the mills keeping the foundries well employed.

Prices are quoted as follows:

No. 1 Northern mill irons.....	\$12 45/60	12 45
No. 1 Southern mill irons.....	12 35/60	12 45
No. 1 foundry.....	14 75/60	14 75
No. 2 ".....	13 75/60	13 85
No. 3 ".....	13 00/60	13 00
Bessemer.....	13 75/60	13 75

## COTTON MARKET.

NEW ORLEANS, LA., January 2.

Editor Manufacturers' Record:

The market may be best described as a waiting one. The influences on one side are the decreasing movement of amount coming into sight weekly and the general firmness of spot holders abroad as well as in this country; on the other hand, however, the fear of an anti-option bill being passed either by the Senate or the House, or both, makes buyers timid and sellers more confident, and at the same time it is creating a feeling among spinners everywhere that the enactment of such a law will place the spot holder in America in somewhat of a defenseless attitude. While spots might not decline so much as contracts, it would at the same time enable the consumer to buy more cheaply, and this, we think, must account largely for the continued apathy of the Continental and English buyers, for certainly it cannot be that trade alone can account for the continued indifference of the consumer everywhere in taking cotton as sparingly as he has done for a few months past. At the same time we find the premiums here for the spring months are almost as great now as they were six weeks ago. The loss coming into sight this past week is 74,000 bales, and in all probability will be 85,000 to 90,000 the present week, and perhaps more. We estimated on the 21st ult. that for the last week of December and the first two weeks of January there would be an average loss of 80,000 bales each week as compared with the same week last year. It looked very doubtful the early part of last week whether we should be right on the first week of the three, and in fact it seemed probable that the loss would not be more than 50,000 bales, but the indications now are that the first two weeks will show an average greater than 80,000, and a full average for the three weeks of that amount, making, therefore, about 500,000 to come into sight for the twenty-one days, against 750,000 last year. Our estimate made on the 19th ult. that we would have 4,750,000 in sight on January 1st will not be realized, as the figure will be smaller. The port movement here last week was large, but the overland and the small increase in stocks at interior points over the previous week was less, with Southern consumption, than 50,000 bales more than the total port movement for the week, and yet two weeks ago the overland movement to Northern mills was 50,000 bales alone. We feel that any material improvement now would be subject to quick depressions, because the higher we go the more decided will be the decline, which will certainly result from any anti-option legislation, which it seems we are certain to get a great deal of during balance of this session of Congress. We do not believe that such a bill will ever become a law, but at the same time the injurious effects from the continual agitation and threat of its passage may be just as serious as the actual passage of the Hatch or Washburn bill. We anticipate a very marked decrease in the movement from this time on, but, after all, as we have before stated, it will be the consumer who

must come to the relief of the market sooner or later if we are to continue present prices or realize higher ones. We see nothing to change our estimate of 6,250,000 for this crop, as it will mean 1,500,000 bales more cotton to come into sight after Friday last than has already appeared at the ports, at the weekly reported interior towns and Southern and Northern consumption, the aggregate of the movement of which constitutes the weekly amount coming into sight.

ATWOOD VIOLETT &amp; Co.

## CLOSING PRICES OF FUTURES JANUARY 5.

Months.	New Orleans.	New York.	Liverpool.
January.....	9.56	9.64	5 17-64 buy.
February.....	9.63	9.77	5 18-64 buy.
March.....	9.70	9.88	5 20-64 buy.
April.....	9.76	9.98	5 21-64
May.....	9.83	10.07	5 23-64
June.....	9.90	10.15	5 25-64
July.....	9.96	10.22	5 27-64 buy.
August.....	10.00	10.26	5 28-64 sel.
September.....	10.00	10.26	5 28-64 sel.
October.....	10.00	10.26	5 28-64 sel.
November.....	10.00	10.26	5 28-64 sel.
December.....	10.00	10.26	5 28-64 sel.
Tone of market.	Firm.	Steady.	Firm.

## CLOSING PRICES OF SPOT COTTON JANUARY 5.

Grade.	New Orleans.	New York.	Liverpool.
Middling.....	9 9-16	9 7-16	5 5-16
Low middling.....	9 3-16	9 7-16	5 3-16
Good ordinary.....	8 11-16	8 1-16	5 1-16
Tone of market.	Firm.	Quiet and Steady.	Firm.

## Southern Textile Notes.

MR. JAMES F. WRAY, of Reidsville, N. C., contemplates establishing a plant for the manufacture of cotton rope, twine, etc., and to that end is now corresponding to obtain complete information, cost of plant, etc.

CAPT. W. D. KYLE, who lately anticipated opening a 25-machine hosiery plant at Opelika, Ala., has been offered such inducements by the Board of Trade at Mobile, Ala., that he may locate in that city. The latter enterprise would be heavily backed by Mobile capital, and under the supervision of an experienced man like Captain Kyle, promises to move rapidly to the front as a new Southern industry.

THE Florence Mills at Forest City, N. C., recently started up by new owners, are meeting with all possible success, being compelled to operate day and night to fill orders.

THE Jackson (Tenn.) Woolen Mills, one of the best equipped in the South, which has been idle since September, 1890, is now operating full time with a jeans factory added.

THE Wytheville (Va.) Woolen & Knitting Mills Co. will enlarge its dyehouse and put in new machinery. This plant turns out cassimeres, blankets, flannels, jeans and hosiery, and its goods enjoy a fine reputation.

THE Excelsior Manufacturing Co., of Cuero, Texas, has been reorganized, and some Dallas parties, experienced in cotton manufacturing, will manage the mill. H. Runge & Co. and H. J. Huck & Co. are the financial backers of the concern, and fifty operatives will be employed.

THE cotton mill plant of the Falls of Neuse Manufacturing Co., at Swepsonville, N. C., was destroyed by fire during the week, causing a loss of \$100,000. Mr. G. Rosenthal, the company's secretary, has stated that the mills will doubtless be rebuilt. The fire was due to the friction of the great belt, and all water pipes being frozen on account of the recent cold spell, nothing could be done to check it.

MR. JNO. R. EMSLEY, proprietor of the Monticello Knitting Mills at Charlottesville, Va., intends putting in additional machinery soon.

MESSRS. J. E. ANDERSON and C. E. Goodwin, lately of Olympia, Va., have

established themselves at Cedar Bluff in the same State, and in company with S. S. Steele, started up the woolen mills. One set of cards and two looms will be operated in the manufacture of cassimeres, jeans, flannels, linseys, etc. Additions of new machinery will soon be made.

## Phosphate and Fertilizer Notes.

THE steamships Rex and Lockwood have been chartered to load phosphate at Fernandina, Fla.

THE Leroy (Fla.) *News* says: "The phosphate companies are beginning to ship rock again, and work in the mines has already commenced."

T. W. PITTS, after whom the town of Pittston, Fla., is named, had his mining machinery all in position and ready to commence work on the 1st inst. This section has one of the richest phosphate beds in the State.

THE shipments of pebble phosphate from Port Tampa, Fla., for the week ending December 19, 1892, were as follows: Schooner Charles K. Schull, for Alexandria, Va., with 1241 tons, shipped by the Bone Valley Phosphate Co.; schooner Edith Berwind, for Baltimore, with 1099 tons, shipped by the Bartow Phosphate Co., and steamship Neto, for Antwerp, with 1689 tons, shipped by the Jacksonville Peace River Co. The steamship Annandale, loaded by the Netherlands Company, is not reported.

THE British steamer Storra Lee was cleared at Brunswick, Ga., on the 29th inst. for Bremen and London. Among her cargo she took out 1000 tons of Florida phosphate valued at \$9000.

THE shipments of pebble phosphate from Punta Gorda, Fla., for the week ending December 24, 1892, were 1530 tons shipped per schooner Agnes Maning for Baltimore by the Charlotte Harbor Phosphate Co.

THE reorganization of the Pharr Phosphate Co., at Bartow, Fla., retains in the board of management Major John G. Reynolds, a large owner of its stock.

It is stated that the Dunnellon Phosphate Co. will build fifteen miles of railroad to connect with the Ambler road at Early Bird, Fla. This company has begun the erection of a handsome office to cost probably \$3000. They have bills for lumber for an elevator and storeroom that will contain 10,000 carloads of phosphate. The company have already shipped 861,229 tons of phosphate to Fernandina up to January 1, 1893.

THE Homeland Pebble Phosphate Co. has completed its line of railway from the works at Bartow, Fla., to a connection with the Florida Southern Railroad, and has begun delivering a cargo of pebble now en route for Port Tampa to receive it. This company has now completed all facilities for shipping, and as they have had large stocks of pebble on hand for some time, active operations will now ensue. The deposit is extensive and the pebble of high grade.

THE British steamship Leander was cleared from Brunswick, Ga., on the 1st inst. for Liverpool, Eng., with a cargo valued at \$213,391. One item on her manifest included 1475 tons of Florida phosphate, valued at \$14,750.

A STRONG stock company has been formed with John M. Bass, of Fort Wayne, Ind.; Calvin S. Brice, of Ohio, and Samuel Thomas as the leading stockholders, for the purpose of erecting car works at Lenoir City, Tenn. They propose erecting a plant at a cost of \$250,000 to have a capacity of fifteen complete cars daily, and the necessary machinery is now being purchased. Charter has been applied for under the name of the Lenoir Car Works and Car Wheel Foundry.

# CONSTRUCTION DEPARTMENT.

**WE PUBLISH**, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

\* Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

✉ In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

Anniston—Bag Factory.—O. M. Reynolds contemplates starting a bag factory.\*

Birmingham—Fertilizer Plant.—Endeavors are being made to organize a company to erect a fertilizer plant to utilize the street-cleanings, garbage, etc.

Brewton—Canning Factory.—Endeavors are being made to organize a company to establish a canning factory. C. F. Rankin can inform.

Hamptonville—Saw Mill.—J. P. Grant will erect a saw mill.

Muscadine—Planing Mill.—Moore & Pollard will add planing-mill machinery to their saw mill.

Plantersville—Saw Mill.—The E. E. Jackson Lumber Co. will put in a saw mill.

Renfro—Saw and Shingle Mill.—R. M. Rogers will erect a saw and shingle mill.

Rockford—Machine Shop.—A machine shop is being erected by J. G. Fulmer and D. L. McAlister.

Scottsboro—Coal Mines.—R. G. Banks, of Florence, Ala., and A. A. Berger, of Baltimore, Md., have purchased valuable coal deposits in Jackson county, Ala., and will open and operate coal mines.

## ARKANSAS.

Clarendon—Lumber Company.—The Clarendon Lumber Co. has been incorporated with F. S. Ellis, president and treasurer; P. J. Wilden, vice-president, and George Spencer, secretary. The capital stock is \$50,000.

Helena—Saw Mill.—McLevy & Co. will erect a saw mill.

Pine Bluff—Shingle Company.—The Red Cypress Shingle Co. has been chartered with J. B. York, president, and C. J. Samstag, secretary and treasurer; capital stock \$500.

## FLORIDA.

Geneva—Irrigating Plant.—Farwell & Lee will erect an irrigating plant.

Jacksonville—Saw Mill.—William Sketter is erecting a saw mill near Jacksonville.

Titusville—Saw and Planing Mill.—R. Ransom will erect a saw and planing mill.

## GEORGIA.

Atlanta—Spice Mills.—The Atlanta Spice Mills have been established by the Kangra Valley Tea Co. for the manufacture of spices.

Cedartown—Saw Mill.—Philpot & Oppert will erect a saw mill.

Chickamauga—Saw Mill.—W. J. West, of Mission Ridge, will erect a saw mill.

Louisville—Saw and Shingle Mill.—G. H. Harrell will erect a hardwood saw mill and cypress shingle mill.

Savannah—Bottling Works.—The Savannah Consolidated Bottling Co. has been incorporated by H. Precht, H. F. Sutter, C. Seeman, J. D. Helmken, G. Eberwein and G. Campsen. The capital stock is \$500, with privilege of increasing it to \$50,000.

Savannah—Canning Factory.—Endeavors are being made to establish a canning factory. William Bailey can give information.

Savannah.—The Savannah Grain & Provision Co., reported last week as incorporated, will organize with Solomon Shiftall, president; Wm. J. Brotherson, secretary and treasurer, and George G. Wilson, superintendent.\*

## KENTUCKY.

Bowling Green—Stave and Heading Factory.—T. J. Sullivan will rebuild his stave and heading factory recently burned.

Covington—Coal Mines.—C. B. Simrall, A. Mack and J. D. Henry have incorporated the Beaver Creek Coal & Mining Co. to operate coal mines, etc. The capital stock is \$250,000, with privilege of increasing to \$1,000,000.

Dillion—Saw Mills.—W. R. Dillion will erect two saw mills.\*

Lexington—Tobacco Factory.—The company reported last week will be organized as the Lexington Tobacco Co. with a capital of \$50,000.

Louisville—Paint Mill.—F. M. Lampton, W. F. Crane and H. S. Ramey have incorporated the Lampton, Crane & Ramey Co. to manufacture and deal in oils, paints, etc. The capital stock is \$50,000, with privilege of increasing to \$200,000.

Louisville—Candy Factory.—The Frank A. Menne Candy Co. has been incorporated to deal in and manufacture confections, by F. A. Menne, W. Kimmel and A. Busath. The capital stock is \$100,000.

Louisville—Real Estate Company.—The South Side Land Co. has been incorporated for the purpose of improving real estate. The capital stock is \$8000.

Louisville—Restaurant Company.—The Louisville Restaurant Co. has been incorporated for the purpose of maintaining restaurants, etc. The capital stock is \$25,000.

Newport—Iron and Steel Company.—The National Iron & Steel Co. has been incorporated by Harry Benjamin and Henry Benjamin to buy and sell iron, steel, etc. The capital stock is \$25,000.

Owensboro—Tobacco Factory.—D. H. Martin, of Greenville, contemplates establishing a tobacco factory at Owensboro in association with Allen Gilmour and W. H. Brannon, of Owensboro.

Somerset—Barrel and Keg Works.—The Central Cider Co. will start keg and barrel works.

## LOUISIANA.

New Orleans—Wagon Material Supply Factory.—The Southern Wagon Material Supply Manufacturing Co., Limited, has been incorporated to manufacture and deal in all kinds of wagon material, with E. J. J. as president; John Schmid, vice-president, and William Grimshaw, secretary and treasurer. The capital stock is \$25,000.

New Orleans—Publishing Company.—The Daily States Publishing Co. has been incorporated to conduct a daily and weekly paper and to do a general publishing business, with H. J. Hearsey, president, and J. P. Smith, secretary. The capital stock is \$50,000.

New Orleans—Lumber Mills.—The Gulf Lumber Co., Limited, has been incorporated to deal in and manufacture lumber, shingles, etc., and to operate saw and planing mills, with L. B. McEwen as president; T. F. Norton, vice-president, and S. Lewison, secretary and treasurer. The capital stock is \$100,000.

New Orleans.—The Crescent City Live Stock Landing & Slaughter-House Co. will enlarge and improve its plant. The cost of the plant when completed will be over \$50,000.

## MARYLAND.

Baltimore—Telephone Company.—The People's Telephone Co. has been incorporated by L. B. McCabe, J. H. C. Watts, W. Wilson, G. R. Carter, C. H. Ware and B. H. Warthen. The capital stock is \$500,000.

Baltimore—Publishing Company.—The John H. Williams Publishing Co. has been incorporated by J. H. Williams, H. T. Poor, W. R. Wilson, J. McElvoy and J. R. Barry. The capital stock is \$6000.

Baltimore—Manufacturing Company.—The Coaline Co. has been incorporated to manufacture coaline, chemical preparations, etc. The incorporators are G. O. Gover, R. Dozier, Jr., J. C. Davis, B. T. Johnson and W. C. Lowndes. The capital stock is \$50,000.

Baltimore—Publishing Company.—B. S. Johnston, D. Bachrach, J. A. Whitcomb, J. G. Schonfarber and M. N. Packard have incorporated the Critic Publishing Co. The capital stock is \$10,000.

Baltimore—Machinery Dealers.—Thos. K. Carey & Bros. have incorporated as the Thos. K. Carey & Bros. Co. to conduct their machinery business.

Big Spring—Creamery.—A company has been organized to establish a creamery with John Martin, president, and Benjamin Charles, secretary and treasurer.

Cumberland—Paper Mills.—L. Lowndes, R. R. Henderson, P. H. Daughtrey, D. P. Miller and A. H. Amick have incorporated the Cumberland Paper Co. to manufacture wood pulp, paper, etc. The capital stock is \$100,000.

Frederick—Straw Hat Factory.—Frank and Ignatius Goode, C. W. Ross, Henry Williams, of

Frederick, and F. J. Fitzpatrick, of Baltimore, have organized the Goode Manufacturing Co. to manufacture straw into hats and other articles.

## MISSISSIPPI.

Biloxi—Planing Mill.—J. R. Harkness will erect a planing mill.

Magnolia—Lumber Mill.—Enviu Bros. will remodel their mills and add a gang saw.

Natchez—Shingle Mill.—Kranson & Caspari contemplate adding a shingle mill to their lumber plant.

Norfield—Lumber Mill.—The Norwood & Butterfield Co. will put in a new flooring machine.

Pott's Camp—Saw Mill.—C. H. Reid will erect a hardwood saw mill.

Vicksburg—Furniture Factory.—Endeavors are being made to organize a company to establish a furniture factory.

## NORTH CAROLINA.

Raleigh—Spring-bed Works.—The Raleigh Spring Bed Co. will increase its capital and enlarge its plant.

South Mills.—Geo. Beveridge will rebuild his shuck factory, reported in this issue as burned.

Statesville—Saw Mills.—Clarke, Meyer & Co. contemplate enlarging their plant.

Sweptown—Cotton Mill.—The Falls of Neuse Manufacturing Co. will rebuild its cotton mill, reported in this issue as burned.

Wilmington—Electric-light Plant.—The Wilmington Street Railway Co. will erect an electric-light plant.

## SOUTH CAROLINA.

Camden—Planing Mill.—Crenshaw & Bolin will erect a planing mill near Camden.

Hannah—Brick-yard.—Ard & Spring have established a brick-yard.

Varnville—Brick Works.—A stock company is being organized to erect brick works. E. R. Ginn can inform.\*

## TENNESSEE.

Arlington—Spoke Works.—The Arlington Spoke Works will add rim machinery to its plant.

Clarksville—Carriage Factory.—J. E. Elder and J. A. Holleman have purchased the carriage works of A. Dugan and will operate same.

Fall River—Saw Mill.—White & Sanders will erect a saw mill.

Harriman—Laundry.—The Crescent Steam Laundry has been established by Hisey & Aydelott.

Huntington—Planing Mill.—Leach, Wieder & Co. will establish a planing mill.

Johnson City—Agricultural Implement Factory.—George R. Hurlbert will establish a plant to manufacture harrows, cultivators, etc.

Kenton—Stave Mill.—J. C. Connell will enlarge his stave mill and add other machinery.

Lenoirs—Car Works.—John M. Bass, of Fort Wayne, Ind.; Calvin S. Brice, of Ohio, and Samuel Thomas have organized a company to erect a \$250,000 car works plant.

Litton—Lumber Mill.—Tulloch & Riggs will establish a lumber mill.

McMinnville—Woolen Mill.—The Tennessee Woolen Mills may put in new machinery.\*

Memphis—Planing Mills.—J. M. Darnell & Son will enlarge their planing mills.

## TEXAS.

Alvarado—Electric-light and Water Works Plant.—An electric-light and water works plant is being erected.

Atlanta—Lumber Mill.—R. W. Grogan will erect a lumber mill with a capacity of 20,000 feet daily.

Bryan—Cotton Compress.—A new company has been organized with W. Koppe, as president; M. D. Cole, vice-president; J. W. Howell, secretary, and H. O. Boawright, treasurer, to erect a compress.

Cleveland—Planing Mill.—A. S. Hall will erect a planing mill.

Conroe—Lumber Mill.—Griffin & Fisher will erect a lumber mill with a capacity of 30,000 feet daily.

Dallas—Mercantile Company.—The Grange Mercantile Co. has been incorporated to sell general merchandise. The capital stock is \$10,000.

Dublin—Agricultural Machinery.—The Dublin Harrow Co. has been incorporated by E. Jones, R. H. McCain, G. W. Andras and A. A. Hartgrove to manufacture implements. The capital stock is \$10,000.

Fort Worth—Electric-light Plant.—The Fort Worth Light & Power Co. will enlarge and extend its plant.

Houston—Sugar Mill.—R. J. Willis & Co., of Galveston, will rebuild their Houston sugar mill reported in this issue as burned.

Houston—Sugar Mill.—H. B. Claffin & Co. will rebuild their sugar mill reported in this issue as burned.

Hughes Springs—Shingle Mill.—G. H. Allen will erect a shingle mill.

Jacksonville—Mercantile Company.—The Jacksonville Grocery Co. has been incorporated by J. C. Garrett, C. Hawkins, W. P. Devereux, F. E. Hann and J. F. Francis, Jr. The capital stock is \$30,000.

San Antonio—Baking-powder Factory.—C. F. Riley is secretary, and D. S. Riley, president and general manager, of the Globe Baking Powder Co., reported last week as incorporated. Factory will be started at once.\*

Victoria—Electric-light Plant.—The Victoria Light & Power Co. will increase the capacity of its plant.

## VIRGINIA.

Cedar Bluffs—Woolen Mills.—C. E. Goodwin, J. E. Anderson and S. S. Steele will operate the Cedar Bluffs woolen mills and add new machinery.

Charlottesville—Ice Factory.—The Hercules Ice Co., lately reported as erecting an ice plant, has been incorporated. The capital stock is \$25,000.

Clifton—Woolen Mills.—The Nettleton Woolen Manufacturing Co. will increase its capital and add new machinery.

Cowan's Depot—Spoke and Shingle Factory.—J. F. Fitzsimmons will establish a spoke and shingle factory.

Isle of Wight—Land and Improvement Company.—The Day's Point Land & Improvement Co. has been incorporated to improve real estate and for construction of electric and gas plants. The capital stock is \$50,000.

Lynchburg—Flour Mill.—Johnson & Hurt will rebuild their flour mill reported in this issue as burned.

Meadowville—Saw Mill.—Edward C. Barney will build a saw mill.

Petersburg—Furniture Company.—The Petersburg Furniture Co. has been incorporated to conduct the furniture business. The capital stock is \$20,000.

Petersburg—Mercantile Company.—The Wm. R. Nichols Coal Co. has been incorporated to conduct the fuel and coal business. The capital stock is \$15,000.

Richmond—Mining.—The Rivanna Tale Mining & Manufacturing Co. has been incorporated. The capital stock is \$50,000.

Richmond—Mercantile Company.—The Richmond Co-operative Fuel, Lumber, Feed & Ice Co. has been incorporated to deal in feed, fuel, etc. The capital stock is \$25,000.

Richmond—Tobacco Factory.—The Thomas Hanewinkel Co. has been incorporated to manufacture cigars, etc. The capital stock is \$25,000.

Roanoke.—The Terry & Huff Cattle & Farming Co. has been incorporated with P. L. Terry as president; S. W. Jamison, vice-president, and L. S. Davis, secretary and treasurer, to conduct a general farming, cattle, dairy and creamery business. The capital stock is \$49,000.

Suffolk—Mattress Factory.—The Suffolk Spring Bed Co., lately reported as erecting a factory, has been incorporated to manufacture woven-wire beds, etc. The capital stock is \$50,000.

Wytheville—Ice and Dairy Company.—The Wytheville Crystal Ice & Dairy Co. has been incorporated to conduct the ice and dairy business. The capital stock is \$20,000.

Wytheville—Woolen and Knitting Mills.—The Wytheville Woolen & Knitting Mills Co. will add machinery.

## WEST VIRGINIA.

Bretz—Lumber Mills.—The Dry Fork Boom & Lumber Co. has been incorporated to operate mills by L. Z. Condon, of Baltimore, Md.; Martin Lane, of Wilmington, Del., and others. The capital stock is \$100,000.

Cairo—Planing Mill.—F. M. Telrish will erect a planing mill.

Moundsville—Electric-light Plant.—Albert Snape & Bro. will put an electric-light plant in their woolen mill.\*

Spencer—Saw Mill.—Nicola Bros., of Pittsburg, Pa., will erect a saw mill.

Wheeling—Planing Mill.—Chapman & Wilson are remodeling their planing mill and will put in new machinery.

Wheeling—Corrugating Works.—Caldwell & Peterson will rebuild their corrugating works reported in this issue as burned.

## BURNED.

Charleston, W. Va.—Killinger Bros.' tannery; loss \$15,000.

Houston, Texas.—H. B. Claffin & Co.'s sugar mills, operated by E. R. Brown, of Houston.



Houston, Texas.—The sugar mill of R. J. Willis & Co., of Galveston.

Lynchburg, Va.—Hollin's mill operated by Johnson & Hurt; loss \$8500.

Midway, La.—E. E. Montgomery's cotton gin.

Nashville, Tenn.—Sulzbacher Bros.' vinegar works; loss \$30,000.

Rockwall, Texas.—Henry Hoskin's cotton gin; loss \$2,000.

South Mills, N. C.—Mr. Beveredge's shuck factory.

Sweetonville, N. C.—The Neuse Mfg. Co.'s cotton mill; loss \$100,000.

Wheeling, W. Va.—Caldwell & Peterson's corrugating works; loss \$100,000.

### BUILDING NOTES.

Georgetown, Ky.—Kinze Stone will erect a \$12,000 dwelling.

Washington, D. C.—W. J. Wallace will erect an \$8000 dwelling.

Washington, D. C.—The Brookland Hall & Literary Society will erect a hall at a cost of \$7800. E. Von Nerta is architect, and E. S. Morgan builder.

### RAILROAD CONSTRUCTION.

Florence, S. C.—Street Railway.—The bill to incorporate the Florence Street & Suburban Railway Co. has passed the legislature, and Jno. P. Coffin, who is president of the company, states that the construction of the road will soon commence.

Garrett, Texas.—Railroad.—E. H. R. Green states that a railroad will be built at once from Garrett to Waco to connect the Texas Midland Railroad and the Waco & Northwestern Railroad. A new charter will be obtained for the latter road and a new company organized to operate it.

Hot Springs, Ark.—Electric Railway.—Edward Hogaboom has let contract for the grading on his electric railway projected to the Ouachita river, and work is to begin at once. The road will be five miles long.

Inverness, Fla.—Railroad.—The South Florida Railroad Co. (office, Sanford) has commenced work on its new extension from Inverness to High Springs, ground having been broken on December 19. The location of this line was finished in November, as we were informed at the time by T. L. Martin, constructing engineer.

La Porte, Texas.—Railroad.—Contract for grading, clearing and bridging about eight miles of the La Porte, Houston & Northern Railroad has been let to J. F. Allen. The work on this line will be commenced at once and pushed with all rapidity possible.

Mobile, Ala.—Railroad.—The recent purchasers of the Mobile street railway have chartered as the Mobile Light & Railway Co., and will arrange for changing the railway to an electric line. The incorporators are Jno. Wilson, J. H. Wilson, J. C. Lisle, G. C. Rogan, W. E. Gordon and Geo. E. Sage; capital stock \$500,000.

Portland, Texas.—Railroad.—The Portland, Monterey & Gulf Railway Co. has been organized at Little Rock, Ark. Its purpose is to build a standard gage railroad from Portland to Monterey, Mexico. The following are interested in the company: W. S. Dunlop, of Little Rock; Jno. S. Little, of Greenwood; E. H. Henderson, of Searcy; Jno. Willacy, of Portland; W. K. Carlisle, of Chicago; A. B. Hall, of Monticello, and others.

Rock Springs, Texas.—Railroad.—A dispatch from Rock Springs states that the Fort Worth & Rio Grande Railway is actively pushing preparations for its extension into Southwest Texas. Surveyors are now working in Mason county, and the exact route of the new road will not be determined until they are finished.

Wadesboro, N. C.—Railroad.—The Atlantic Coast Line has made preliminary surveys for a line from Wadesboro to Winston, a distance of ninety miles. Construction work will be commenced as soon as the locating surveys are completed.

ARRANGEMENTS have been effected through the agency of Edward Morton & Co., 53 Broadway, New York, for the conversion of the street railroad system of Lancaster, Ohio, into an electric road. This embraces the changing of the present horse-car road of about four miles into electric and the extending of the road six miles. Work on the present road will be commenced immediately, and on the extension in the spring.

R. C. POPE, Chamber of Commerce, Chicago, is meeting with splendid success in the sale of his improved reversible street roller, which is handled by horse-power. The cheapness and convenience of this roller has made it quite popular with builders of streets and roads. Mr. Pope has issued a new catalogue which contains, besides cuts of the roller and testimonials, some very practical ideas in road-making, which he will be pleased to mail to any one interested in the improvement of our streets and highways.

### MACHINERY WANTED

**If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.**

Bag Factory.—O. M. Reynolds, Anniston, Ala., wants prices on outfit of machinery for bag factory.

Barrel Machinery.—The Central Cider Co., Somerset, Ky., wants barrel machinery.

Blower.—W. J. Dunlop, Tallapoosa, Ga., wants prices on 24-inch blower for foundry.

Boiler.—The Globe Baking Powder Co., San Antonio, Texas, will want a three to five horse-power boiler. Address D. S. Riley, president.

Boiler.—The Berkeley Springs Water Works & Improvement Co., Berkeley Springs, W. Va., will need a boiler.

Brick Works.—E. R. Ginn, Varnville, S. C., wants estimates on cost of brick works with 20,000 capacity daily.

Bridge.—C. A. Porter, Flat Rock, Ind., wants to contract for the construction of a foot suspension bridge over a stream 300 feet long.

Broom Machinery.—J. O. James, Petersburg, Va., wants information and prices on broom-making machinery.

Can Machinery.—T. B. Ferguson & Sons, Lexington, Ky., will want a can machine.

Cannery.—J. E. Curtis, Wellsburg, W. Va., wants information on cannery and cost of outfit for same.

Coffee Roaster.—The Globe Baking Powder Co., San Antonio, Texas, will want a coffee roaster. Address D. S. Riley, president.

Cotton-mill Machinery.—Jas. F. Wray, Reidsville, N. C., wants to know the cost of a plant for manufacturing cotton rope, twine, etc.

Drill Press.—W. J. Dunlop, Tallapoosa, Ga., wants prices on 20-inch drill press.

Electrical Works.—The McNeill Tindler Electric Co., Winchester, Ky., will need an equipment for electrical works.

Electric-light Plant.—Morton & Bradway, Athens, Ga., want prices on electric-light plant of 250 incandescent lights, alternating current, necessary transformers, lamps and all other apparatus necessary to install first-class plant.

Electric-light Plant.—Albert Snape & Brother, Moundsville, W. Va., will soon want full equipment for electric lighting (except steam-power) for thirty incandescent lamps.

Electric-light Plant.—The Berkeley Springs Water Works & Improvement Co., Berkeley Springs, W. Va., expects to establish an electric-light plant.

Electric-light Plant.—The Tennessee Woolen Mills, McMinnville, Tenn., may buy small electric-light plant.

Elevator.—The Savannah Grain & Provision Co., Savannah, Ga., wants an elevator.

Engine.—The Clinton Manufacturing Co., Clinton, S. C., will want a sixty horse-power engine.

Engine.—The Tennessee Woolen Mills, McMinnville, Tenn., may buy an engine.

Engine.—The Berkeley Springs Water Works & Improvement Co., Berkeley Springs, W. Va., wants an engine.

Engine.—The Globe Baking Powder Co., San Antonio, Texas, will want an engine. Address D. S. Riley, president.

Gasoline Engine.—T. B. Ferguson & Sons, Lexington, Ky., need a gasoline engine.

Ice Machinery.—James Aumann, Wytheville, Va., wants to correspond with manufacturers of icemaking machinery, as he wants full particulars.

Keg Machinery.—The Central Cider Co., Somerset, Ky., wants keg machinery.

Knitting Mills.—Fifty or more knitting machines will be wanted by P. O. Box 559, Greenville, S. C.; state terms and give complete particulars.

Lathe.—W. J. Dunlop, Tallapoosa, Ga., wants prices on 20-inch lathe and on 10-inch lathe, new and second-hand.

Lathe.—The Dilley Foundry Co., Pine Bluff, Ark., wants to purchase a 20-inch by 8-foot screw-cutting lathe.

Lime Furnace.—The Anniston Lime & Coal Co., Anniston, Ala., is in the market for lime furnace outfit.

Molder.—The Clinton Manufacturing Co., Clinton, S. C., will want a 9-inch 4-side molder.

Pump.—The Berkeley Springs Water Works & Improvement Co., Berkeley Springs, W. Va., will need pump.

Piping.—The Berkeley Springs Water Works &

Improvement Co., Berkeley Springs, W. Va., will need about one and a-half miles of pipe.

Planer.—W. J. Dunlop, Tallapoosa, Ga., wants prices on an iron planer eight or ten feet long, second-hand.

Planing Mill.—W. R. Dillion, Dillion, Ky., may soon want planing-mill machinery.

Presses.—The Dilley Foundry Co., Pine Bluff, Ark., wants to purchase a 10 or 15-ton wheel press and an 18-inch or 20-inch drill press.

Rice Machinery.—The Savannah Grain & Provision Co., Savannah, Ga., wants a machine for manipulating rice, that is, assorting different sizes of bean and fanning it. Solomon Sheftall, president.

Saws.—D. B. Barbour, Roanoke, Va., wants prices on a hand saw complete. Also on one saw three-quarters, one saw one-half, one saw three-eighths and two saws one-quarter.

Shafting, etc.—The Clinton Manufacturing Co., Clinton, S. C., will want 100 feet of two and seven-sixteenths shafting and hangers.

Shaper.—The Dilley Foundry Co., Pine Bluff, Ark., wants to purchase an 18 or 20-inch stroke shaper.

Spice Mill.—The Globe Baking Powder Co., San Antonio, Texas, will want a spice mill. Address D. L. Riley, president.

Spindle Shaper.—D. B. Barbour, Roanoke, Va., wants a single spindle shaper with one-half dozen good variety of bits.

Spring machinery.—G. M. Burnett & Co., Moreland, Ky., wants cast spool or roller for making spiral springs.

Standpipes.—Sydney & Shepard, Richmond, Va., are in the market for two iron standpipes, one to be thirty feet in diameter and eighty feet high, plain iron ladder and cornice finish on top, the other 25x100 feet. Want prices, erected, specifications, etc. (without foundations).

Tank.—The Georgia Farmers' Oil & Fertilizer Co., Madison, Ga., contemplate erecting a 5000-gallon iron tank.

Wire Machine.—Jno. N. Stearns & Co., Petersburg, Va., are in need of a wire straightener for wire up to 1/4-inch diameter.

Wood Pulp Machinery.—The Richmond Basket & Woodenware Co., Richmond, Va., wants catalogue and price-list of wood pulp machinery.

Woodworking Machinery.—The Ybor City Novelty Works, Tampa, Fla., will want woodworking machinery. Address T. N. Henderson, manager.

The Acorn Shoe Dressing Co., of 1027 Shelby street, Louisville, Ky., wants prices on shellac and sponges and 4-ounce shoe-dressing bottles. The company also wants addresses of aniline manufacturers.

Messrs. Morton & Bradway, Athens, Ga., want prices on furniture to furnish 70-room hotel; good substantial furniture wanted.

### SOUTHERN FINANCIAL NEWS.

#### New Banks.

Augusta, Ga.—The Georgia Railroad Bank has been organized to continue the banking business of the Georgia Railroad & Banking Co. The following are the officers and directors: President, Charles H. Phinizy; vice-president, Hamilton H. Hickman; cashier, Charles G. Goodrich; directors, Col. Charles H. Phinizy, Judge William M. Reese, Gov. Henry D. McDaniel, H. H. Hickman, Hon. James H. Alexander, Major Daniel N. Spear, Leonard Phinizy, Dr. Robert D. Spalding, Jacob Phinizy, George D. Thomas, William A. Latimer and Charles G. Goodrich.

Bartow, Fla.—The Polk County National Bank has purchased the Bank of Bartow, assuming the latter's liabilities, and covering all its assets with a collateral guarantee for their full collection. Warren Tyler is cashier.

Camden, Ala.—The Wilcox County Bank, reported lately as chartered by the legislature, will be ready for business by April next. Sol. D. Block can inform.

Hope, Ark.—A bank with a capital of \$50,000 has been organized with J. T. West, president, and S. R. Oglesby, cashier.

Salisbury, Md.—The Farmers and Merchants' Savings Bank has been organized with the following directors: Geo. D. Insley, K. C. Horsey, Oak Hall, Va.; W. H. Stevens, Seaford, Del.; John Robinson, Sharptown; N. T. Fitch, R. D. Grier, W. H. McConkey, A. F. Parsons, L. P. Coulbourn, Lacy Thoroughgood, D. W. Perdue and H. Brewington, of Salisbury. Mr. Stevens is president and Mr. Grier vice-president and Dr. Samuel A. Graham cashier.

Washington, N. C.—The bank reported fully in our issue of 23d inst. will be a State bank, and is to be known as the Bank of Washington. Charter will be procured as soon as the legislature meets, and business is expected to be commenced about February 1st. Thos. J. Latham, cashier.

Washington, N. C.—The First National Bank, reported last week as applying for authority to organize, will succeed the Beaufort County Bank, A. M. Dumay, cashier.

Winnborough, S. C.—The corporate existence of the Winnborough National Bank has been extended to January 31, 1913.

Baltimore, Md.—The Traders' National Bank has declared a semi-annual dividend of 3 per cent., and the People's Bank a semi-annual dividend of 2 per cent.

Baltimore, Md.—The Border State Savings Bank has declared an extra dividend of 1 per cent., the National Howard Bank a dividend of 2 1/2 per cent., the National Bank of Baltimore a semi-annual dividend of 4 1/2 per cent., the Commercial and Farmers' National Bank a semi-annual dividend of 3 per cent., the National Bank of Commerce a semi-annual dividend of 2 1/2 per cent., the American National Bank a semi-annual dividend of 2 1/2 per cent., the Merchants' National Bank a semi-annual dividend of 4 per cent., the Equitable National Bank a semi-annual dividend of 2 1/2 per cent., the German-American Bank a semi-annual dividend of 3 per cent., the Farmers and Merchants' National Bank a semi-annual dividend of 3 1/2 per cent., the George's Creek Coal & Iron Co. a semi-annual dividend of \$3.00 per share, the National Union Bank of Baltimore a dividend of 3 1/2 per cent., the German Bank of Baltimore City a semi-annual dividend of 2 1/2 per cent., the Drovers and Mechanics' National Bank a semi-annual dividend of 3 per cent., the National Farmers and Planters' Bank a semi-annual dividend of 5 per cent., the National Exchange Bank a semi-annual dividend of 3 per cent., the Manufacturers' National Bank a semi-annual dividend of 3 1/2 per cent., the National Mechanics' Bank a semi-annual dividend of 3 per cent., the Citizens' National Bank a semi-annual dividend of 5 per cent., the American Fire Insurance Co. a semi-annual dividend of 4 per cent., the Maryland Fire Insurance Co. a semi-annual dividend of 3 per cent., the German Fire Insurance Co. a dividend of 5 per cent., the Third National Bank a semi-annual dividend of 2 per cent., the Associated Firemen's Insurance Co. a semi-annual dividend of 4 per cent., the Northern Central Railway Co. a semi-annual dividend of 5 per cent., the Western National Bank a semi-annual dividend of 4 per cent., the German-American Fire Insurance Co. a semi-annual dividend of 3 per cent., and the Peabody Fire Insurance Co. a semi-annual dividend of 5 per cent.

Bedford City, Va.—The First National Bank has declared a semi-annual dividend of 4 per cent.

Birmingham, Ala.—M. A. Devitt, of Chicago, has purchased \$140,000 of Birmingham's new bonds at a premium of 2 1/2 per cent. and accrued interest.

Charleston, S. C.—The First National Bank has declared its regular semi-annual dividend of \$6.00 per share and a special dividend of \$10.00 per share, the American Savings Bank a dividend of 10 per cent., the South Carolina Loan & Trust Co. a semi-annual dividend of \$3.00 per share, the Exchange Banking & Trust Co. a semi-annual dividend of \$3.00 per share, the Charleston City Railway Co. a dividend of \$1.50 per share.

Charleston, S. C.—The Central National Bank has declared a semi-annual dividend of 5 per cent., the Charleston City Railway Co. a dividend of \$1.50 per share, the Bank of Charleston National Banking Association a semi-annual dividend of \$4.00 a share, the American Savings Bank an annual dividend of 10 per cent., the Exchange Banking & Trust Co. a semi-annual dividend of \$3.00 per share, the Dime Savings Bank a semi-annual dividend of \$3.00 per share, and the Nickel Savings Bank a semi-annual dividend of \$1.50 per share.

Chattanooga, Tenn.—The Chattanooga National Bank has declared a dividend of 4 per cent.

Columbia, S. C.—The Loan and Exchange Bank has declared a dividend of 4 per cent.

Columbus, Ga.—The Third National Bank has declared a semi-annual dividend of 3 1/2 per cent., the Columbus National Bank a semi-annual dividend of 5 per cent., the Chattahoochee National Bank a 4 per cent. dividend, the Merchants and Mechanics' Bank a semi-annual dividend of 4 per cent., the Muscogee Manufacturing Co. an annual dividend of 6 per cent. The Eagle & Phoenix Manufacturing Co. has paid 3 per cent. interest on \$724,000 in coupon bonds, paying out \$22,720. They are also paying 5 per cent. interest on \$296,000 in deposits.

Eufaula, Ala.—The Eufaula Cotton Mills have declared a semi-annual dividend of 4 per cent.

Fort Worth, Texas.—The city will receive bids until January 20, 1893, for the purchase of \$158,000 of 5 per cent. gold bonds, dated May 1, 1893, payable semi-annually. For further particulars address B. B. Paddock, mayor.

Galveston, Texas.—The First National Bank has declared a semi-annual dividend of 6 per cent., and the Texas Guarantee & Trust Co. a semi-annual dividend of 4 per cent.

Louisville, Ky.—The Louisville Banking Co. has declared a quarterly dividend of 4 per cent., the Farmers' Tobacco Warehouse Co. an annual dividend of 10 per cent., the Third National Bank a semi-annual dividend of 4 per cent., the

German Bank a semi-annual dividend of 9 per cent., the Western Bank a semi-annual dividend of 4 per cent., the Western Insurance Co. a semi-annual dividend of 4 per cent., the Birmingham Rolling Mill Co. a semi-annual dividend of \$3.50 per share, the Kentucky Trust Co. a semi-annual dividend of 3 per cent., the Merchants' National Bank a semi-annual dividend of 3 per cent., the Dime Savings Bank a semi-annual dividend of 3 per cent., the Louisville Trust Co. a quarterly dividend of 2 per cent., the Louisville Deposit Bank a semi-annual dividend of 3 per cent., the German Insurance Bank a semi-annual dividend of 5 per cent., the German Insurance Co. a semi-annual dividend of 3 per cent., the Farmers & Drivers' Bank a semi-annual dividend of 4 per cent., and the Union National Bank a dividend of 3 per cent.

Lynchburg, Va.—The Commercial Bank of Lynchburg has declared a semi-annual dividend of 4 per cent., the People's National Bank a quarterly dividend of 2½ per cent., the National Exchange Bank a dividend of 5 per cent., and the Lynchburg National Bank a semi-annual dividend of 5 per cent.

New Orleans, La.—The American National Bank has declared a dividend of 3 per cent., the New Orleans & Carrollton Railroad Co. a quarterly dividend of \$1.50 a share, and the Eureka Homestead Society a dividend of 5 per cent.

New Orleans, La.—The Germania Savings Bank has declared a semi-annual dividend of \$4 per share, the New Orleans Canal & Banking Co. a dividend of \$4 per share, the Hibernia National Bank a dividend of 5 per cent., the Mutual National Bank a dividend of \$3 a share, the People's Bank a semi-annual dividend of 4 per cent., the State National Bank a semi-annual dividend of 4 per cent., the Germania National Bank a semi-annual dividend of 5 per cent., the Whitney National Bank a dividend of 4 per cent., the Union National Bank a semi-annual dividend of \$4 per share, the Louisiana National Bank a semi-annual dividend of \$4 a share, the Bank of Commerce a semi-annual dividend of 3 per cent., the Canal & Claiborne Railroad a dividend of \$1 a share and the Rosetta Gravel, Paving & Improvement Co. a semi-annual dividend of \$5 per share.

Portsmouth, Va.—The First United States Excelsior Building Association has been incorporated with a capital stock of \$500,000.

Richmond, Va.—The Old Dominion Steamship Co. has declared a semi-annual dividend of 3 per cent., the City Bank of Richmond a semi-annual dividend of 3 per cent., the Citizens' Bank a semi-annual dividend of 3 per cent., the Guarantee Building, Loan & Trust Co. a semi-annual dividend of 5 per cent., the Planters' National Bank a dividend of 3 per cent., the Home Building Co. a semi-annual dividend of 4 per cent., the Union Bank of Richmond a semi-annual dividend of 8 per cent., and the State Bank of Virginia a semi-annual dividend of 3½ per cent.

Roanoke, Va.—The First National Bank has declared a semi-annual dividend of 6 per cent., the National Exchange Bank a semi-annual dividend of 3 per cent., the Commercial National Bank a semi-annual dividend of 3 per cent., the Roanoke Trust, Loan & Safe Deposit Co. a semi-annual dividend of 5 per cent., the Fidelity Loan & Trust Co. a semi-annual dividend of 4 per cent., the Traders' Loan, Trust & Deposit Co. a semi-annual dividend of 5 per cent., and the Roanoke Savings Bank a semi-annual dividend of 3 per cent.

Savannah, Ga.—The Southern Bank of Georgia has declared a semi-annual dividend of 5 per cent., and the Merchants' National Bank a semi-annual dividend of \$3.50 a share.

Staunton, Va.—The Augusta Perpetual Building & Loan Co. has declared a semi-annual dividend of \$4 per share.

### TRADE NOTES.

The Almy Water Tube Boiler Co., Providence, R. I., have recently shipped their product to several Baltimore parties.

The Boston Belting Co., at its annual meeting held a few days ago, re-elected the old board of officers and increased its capital stock.

A. R. PITKIN & Co., of Providence, R. I., have established a branch office and salesroom in Boston for the sale of their machinery specialties.

The D. F. Morgan Boiler Co., of Akron, Ohio, has established an Eastern office at No. 48 Centre street, New York, which will be under the personal management of Mr. Morgan.

The Shipman Engine Co., Boston, reports a large number of sales of automatic steam engines, the orders coming from all parts of the United States as well as from foreign countries.

L. GODFREY, of Providence, R. I., has the contract for the equipment of the new yarn mill of Mark Morgan, at Laurel Hill, N. C. Several carloads of carding and spinning machines have been sent the past week to be followed by other shipments at once.

The Becker Manufacturing Co., of Fitchburg, Mass., is just completing a new milling machine embodying several new features that make it the superior of the well-known product of this concern for some years past.

The contract for covering the Texas State building at the World's Fair was awarded to Fred. W. Bishoff & Co., of Chicago. It will be a metal roof in imitation of Spanish tiling. This firm used the same material in covering the New York State building and the fisheries building.

The directors of the Chicago Rawhide Co. will hold their annual meeting the first Saturday in January. Manager Pieble will have some good news for the stockholders in regard to the growth of their foreign trade and the success of their rawhide pinion, which solves the problem of noiseless motors on street cars.

The New York Evening Post says: "The Hon. T. H. Anderson, United States minister to Bolivia, says, in a recent letter to the Department of State, Washington, D. C., that the industry of working wood by machinery is a growing one in South America, and the trade for all classes of wood-working machinery is given to the United States. And he further says that the Egan Co., of Cincinnati, Ohio, controls over 50 per cent. of this trade in this class of goods, simply as the result of their enterprise in successfully placing their superior goods before the South American buyers."

The machinery department at the World's Fair at Chicago will be an interesting one to mechanics. The Egan Co., of Cincinnati, the well-known builders of woodworking machinery, will make one of the finest displays ever made in that line. Some novel time and labor-saving machines will be shown in practical operation.

The Scranton Traction Co., of Scranton, Pa., has placed the contract for the buildings of its new plant with the Berlin Iron Bridge Co., of East Berlin, Conn. The boiler and engine-room will be 65 feet wide by 200 feet long, with a machine shop and car shed 93 feet wide by 225 feet long. The entire plant will be fire-proof, of the well-known Berlin construction.

The patent draw lug and bolts manufactured by the Winship Manufacturing Co., of Racine, Wis., are being adopted by nearly all the manufacturers of tanks because of their strength and durability over riveted bands. This old and well-known concern also manufacture the Eureka sand-papering machines, besides a line of agricultural tools and implements.

A FRANCHISE has been granted by the city of Guthrie, Oklahoma, for an electric street railway, and a company has been formed to carry out the work. It is intended to commence work at once on the construction of three miles of road, and to extend it from time to time as the needs of the town require. Edward Morton & Co., 53 Broadway, New York, have the matter in hand.

JOSIAH PIERCE, JR., civil engineer, has opened a branch office at 1324 F street, Washington, D. C., in addition to his main office, room 10, southeast corner Calvert & Baltimore streets, Baltimore, Md. Mr. Pierce is prepared to organize and superintend all kinds of topographic surveys, laying out towns and suburban property, landscape engineering, installation of electric plants for light or power, railroad surveys, construction and other engineering work.

THE "Providence" patent steam capstans, steam gypsies and dock steam capstans, manufactured by the American Ship Windlass Co., of Providence, R. I., are adaptable for a great variety of uses, and save a larger percentage of time and expense than almost any of the labor-saving devices of the day. In September, 1881, William Sellers & Co., of Philadelphia, put one in their yard for hauling cars loaded with pig iron, coal and molding sand. After using same for over three years they gave the American Ship Windlass Co. the following certificate: "In reply to your favor of the 13th inst., may say that we have found the steam capstan furnished by you to be exceedingly useful and convenient for the purpose intended."

### TRADE LITERATURE.

We are in receipt of a calendar for 1893 issued by F. E. Myers & Bro., of Ashland, Ohio, manufacturers of an extensive line of pumps, hay tools, etc., for farmers' use. The calendar is illustrated with numerous cuts of the various implements manufactured.

The Sims Manufacturing Co., of Newark, Ohio, has issued a new catalogue and price-list of Sims' patent cave trough. This trough is very convenient to put in place, making water-tight joints without the use of solder or rivets. The catalogue describes these various advantages and illustrates them clearly.

The Cleveland Twist Drill Co., of Cleveland, Ohio, has issued a very neat and comprehensive catalogue for 1893. Several lists of tools in that line which have never before been published are shown, and also a much longer list of sizes of drills than usually found. One interesting feature is the list of millimetre sizes, with a table of corresponding sizes in thousandths of an inch, an extremely useful thing for manufacturers desiring drills intermediate between the usual sixty-fourth sizes. The catalogue is a most complete one for reference and tasty in appearance.

The William A. Harris Steam Engine Co., of Providence, R. I., has issued an excellent pamphlet describing the Harris-Corliss engine. Each detail of the engine is considered and its purpose explained in a comprehensive manner. Condensing and coupled engines, with the main features of advantage in each, are treated upon. Non-condensing, condensing, cross and tandem compound engines and triple expansion engines are illustrated and described. A chapter on foundations is interesting, and a table of standard sizes, floor space, etc., will be useful to every user of power. A list of over seven hundred establishments where these engines are in use is given.

J. W. PENFIELD & SON, of Willoughby, Ohio, have issued a condensed catalogue of their brick-making machinery which is a model of neatness and convenience. The line of catalogues issued by this firm relative to the various classes of machines which they manufacture are well known, and this little one, combining many of the principal features of all the others, is a most convenient addition to the list. The catalogue is 3½x6 inches, containing thirty-one pages. Numerous illustrations are given of brickmaking and clayworking machinery, and on each page appears an illustration in red of some special brick shapes. It is indeed the "Busy Brick-maker's Catalogue," as the title announces, and every brickmaker needs one.

### OPPORTUNITIES FOR INVESTMENT

We shall be pleased to answer communications and give information concerning the following opportunities for investment. Address all correspondence to the MANUFACTURERS' RECORD, Baltimore, Md., and be particular to give the number of the advertisement to which you refer.

No. 6.—PHOSPHATE LAND near Eureka, Fla., in the phosphate belt. It is heavily timbered with long-leaf pine; also a small tract near Fort Meade, Fla. Several small tracts in Marion, Orange, Lake, Polk, Pasco and Putnam counties, Fla., suitable for orange and vegetable growing.

No. 7.—A MANUFACTURING COMPANY in Texas desires to place \$28,000 ten-year 8 per cent. mortgage bonds, the total issue being \$60,000, of which \$32,000 has already been sold. The proceeds are to be used for final payments on machinery and for working capital. The bonds are secured by the entire property of the company, consisting of factory building, machinery and real estate, all of which has a clear title and is free of any incumbrance.

No. 8.—PHOSPHATE LAND.—600 acres pebble phosphate land within one and one-half miles of two important and competitive railroads. Extensive deposits in sand and marl matrix from two to fifteen feet deep, and ranging from 30 to 80 per cent. pebble. Analyses show from 60 to 80 per cent. phosphate of lime.

No. 9.—A tract of land located in the suburbs of Macon, Ga., and admirably adapted to manufacturing purposes, is offered for sale at reasonable price. The property is at the junction of three railroad lines, has abundant water supply, labor can be obtained cheaply, and all conditions requisite for industrial enterprises are present.

No. 10.—About 10,000 acres of mineral and timber land in one tract in North Carolina can be purchased cheap. The minerals are copper, iron, silver and nickel.

No. 11.—A tract of about 10,000 acres of timber land near Bristol, Tenn. Contains also several large deposits of iron ore which will soon be accessible by railroads now under construction.

No. 12.—About 17,000 acres of coal and timber land in Scott and Wise counties, Virginia, near to both the Norfolk & Western and South Atlantic & Ohio Railroads.

No. 13.—A copper ore property is for sale in North Carolina. There is an extensive deposit of ore upon which some development has been done with results that indicate the existence of a valuable property.

No. 14.—A woodworking concern in Virginia, engaged in the manufacture of interior woodwork, with a well-established trade and an

abundance of orders in hand, desires to secure \$10,000 of additional capital to increase the plant and enable more advantageous purchases of material. It is desired that the investor of additional capital in this company shall assume its financial management. The business is well organized, has good plant, and is making money. The addition of more capital will greatly increase its facilities and earning power.

No. 15.—A fine tract of timber property in North Carolina, aggregating about 1,200 acres and covered with hardwoods and pine, can be secured at a reasonable figure. About one-quarter of the property is cleared and is admirable farming land. There are buildings upon the tract which could be utilized to good advantage for manufacturing purposes. There is a railroad station within one mile of this tract.

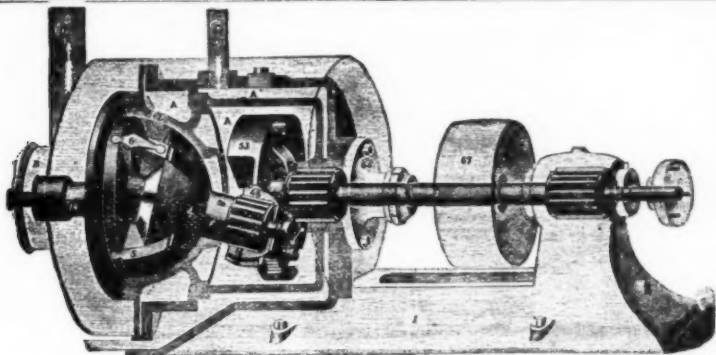
No. 16.—A valuable coal property in Tennessee, which is well under development, shipping coal regularly and earning a handsome return upon its value, can be purchased at a low figure. The property is sure to earn, under proper management, 10 to 15 per cent. per annum on the price that is asked for it. The property has been in operation about two years, and the mines are well established, and the shipping facilities are excellent.

No. 17.—We have knowledge of a large and very valuable granite property in Virginia, which is available for development and which ought to prove a very good investment. The property lies two and one-half miles from the Norfolk & Western Railroad, and very favorable arrangements can be made for the construction of a side track to the quarry. The property has never been developed, but could be opened at once at small expense. The granite is of excellent quality, admirably suited for building purposes. The color ranges from pale pink to purple, and the stone is susceptible of a high polish. There are quarries not far distant upon the same vein which are furnishing stone that has a wide reputation.

### TABLE OF CONTENTS.

	Page.
THE SOUTH IN 1892:	
New Industries in the South.....	453
Railroad Interests of the South.....	453
Banking Interests of the South.....	454
The South's Foreign Commerce.....	455
The Cotton Crops.....	455
Cotton Manufacturing in the South.....	456
South Carolina and Florida Phosphates.....	457
The Naval Stores Trade.....	458
Southern Lumber Trade.....	459
Maryland's Canning and Packing Industry.....	460
Iron Trade of the South in 1892.....	461
The Southern Coal Industry.....	462
Assessed Value of Property.....	463
EDITORIAL:	
The British Spinners' Strike.....	464
Southern Progress in 1892.....	464
The Dog Nuisance in the South.....	464
Cotton Manufacturing in the South.....	465
Peaches in Georgia.....	465
RAILROAD NEWS:	
The News of Wall Street.....	466
Railroad Earnings and Expenses in 1892.....	466
Rolling Stock as an Advertising Medium.....	466
Progress of the Coal River Railroad.....	466
Southern Railroad Notes.....	466
A New Upper Monongahela Mine.....	467
Leases in the New River Coal Field.....	467
Coal and Coke Notes.....	467
Savannah's Sea Suburbs.....	467
LUMBER:	
Southern Lumber Notes.....	468
Lumber Market Reviews:	
New York.....	468
Memphis.....	468
IRON MARKETS:	
Philadelphia.....	469
Wheeling.....	469
Cotton Market.....	469
Southern Textile Notes.....	469
Phosphate and Fertilizer Notes.....	469
CONSTRUCTION DEPARTMENT:	
New Enterprises.....	470
Building Notes.....	471
Railroad Construction.....	471
Machinery Wanted.....	471
Southern Financial News.....	471
Trade Notes.....	472
Trade Literature.....	472
Opportunities for Investment.....	472





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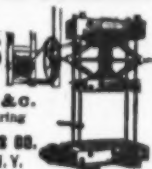
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**UNITED STATES ENGINEER OFFICE, NEWPORT, R. I.** November 26, 1892. **SEALED PROPOSALS**, in triplicate, for dredging in Newport Harbor, R. I., will be received at this office until 12 M., noon, on the 10th day of January, 1893, and then opened. The attention of bidders is invited to the Acts of Congress approved February 26th, 1885, and February 2d, 1887, Vol. 23, page 332, and Vol. 24, page 414, Statutes at Large, and the Act of August 1, 1892, Sections 1 and 2 (Public No. 193). The United States reserves the right to reject any or all proposals and to waive any informalities. Full information furnished on application. W. H. BIXBY, Captain Corps of Engineers, U. S. Army.

**TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C.** Jan. 3, 1893. **SEALED PROPOSALS** will be received at this office until 2 o'clock P. M. on the 31st day of January, 1893, and opened immediately thereafter, for all the labor and materials required for the Cut Stone Work and Brick Work, Iron and Wood Floor, Ceiling and Roof Construction and Roof Covering for the Superstructure of the U. S. Postoffice Building at Danville, Ill., in accordance with drawings and specification, copies of which may be had on application at this office or the office of the supervising Architect at Danville, Ill. Each bid must be accompanied by a certified check for a sum not less than 2 per cent of the amount of proposal. The right is reserved to reject any or all bids, and to waive any defect or informality in any bid if it is deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidder. Proposals must be enclosed in envelopes sealed and marked "Proposal for the Cut Stone Work and Brick Work, Iron and Wood Floor, Ceiling and Roof Construction and Roof Covering for the Superstructure of the U. S. Postoffice Building at Danville, Ill.," and addressed to W. J. EDRROOKE, Supervising Architect.

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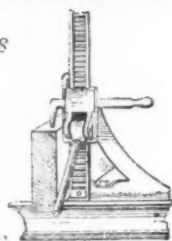
A stock of Horizontal and Vertical Tubular Boilers, Bogardus Mill, Simpson Crusher, 30-in. Burr Stone Mill.

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100 feet 7-inch Wrought Iron Pipe.  
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**Steel Head Blocks**  
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**Steel "Out & Out"**



Being compact run easier, being strong last longer, being simple **COST LESS MONEY** than any Saw Mill in the Southern States.

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The half interest in **PLANING MILL** to experienced man for \$1,000 or will sell the whole property. Location first-class.

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**A Saw and Planing Mill!**  
**SITUATED IN FLORIDA,**

On the J. T. & K. W. R. R., and St. John's River.

Why We Sell.

Because absorbed in another line of business, and not wishing "too many irons in the fire," we have determined to put this valuable property into the market. The outfit consists of

- 1 Mill Carriage, 3 Saws.
- 1 Shingle Machine, 2 Saws.
- 1 Bevel Rip Saw, 4 Saws.
- 1 Gig Saw, 6 Saws.
- 1 Table Cut Off Saw, 2 Saws.
- 1 Endless Band Saw Resaw, 7 Saws.
- 1 24 in. Planer and Double Surfer.
- 1 15 in. Planer and Double Surfer.
- 1 Hand Planer.
- 1 Tenoning Machine.
- 1 Mortising and Boring Machine.
- 1 Moulder.
- 1 Lathe and Tools.
- 1 Drill Press.
- 1 Lath Machine.
- 1 Bolter Machine.
- 2 Automatic Emery Wheels.
- 1 Root Mortiser.
- 1 Foot Rip Saw.
- 1 Engine.
- 3 Steel Boilers.

All Belts in good condition. Quantities of small tools. This is a splendid opportunity for a profitable investment.

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The Real Estate and Buildings of the Ft. Scott Foundry and Machine Works Co., at Ft. Scott, Kansas.

The Most Successful Foundry and Machine Shop Plant and Best Location in the West.

The company owning and operating this plant continuously and very profitably for the past fifteen years, having brought out some patented specialties, that are sold mostly in the Eastern States and also for export, were compelled, on this account, to locate farther east, and now have under construction at Chicago Heights, Cook County, Illinois, with largely increased capacity, the buildings for their new plant, and will remove all the machinery in their Ft. Scott Works to Chicago about the 1st of December next.

The buildings are practically new, having been erected in 1886, from the most modern and approved plans of foundry and machine buildings, are of ample dimensions for large capacity, well lighted, arranged for traveling cranes throughout; location the best in the city; on about thirteen acres of high ground immediately within the junction, and connected by switches with all the systems of railways entering Ft. Scott.

Ft. Scott has long been celebrated for cheap fuel, cheap living and a cheap and very desirable class of both skilled and common labor.

The business was established here twenty-three years ago, and the works have never been closed. A large general foundry and machine shop trade comes to this city almost daily from half a dozen States and territories; is in close proximity to the great coal, zinc and lead regions of Missouri, Kansas and Indian Territory.

**A Rare Opportunity for a Few Practical Men to Make a Fortune.**

The property will be sold at a great bargain, and upon easy terms.

Photos of the works, together with sizes and plans of buildings and full particulars will be forwarded on application. Address

**WALBURN-SWENSON CO.**  
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(49) forty-nine SECOND-HAND Machine Tools, in Excellent Condition.

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Makes.

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**LATHES,  
DRILLS,  
SHAPERS,  
PLANERS.**

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(Successors to H. B. Smith Machine Co., Phila.)

## SECOND-HAND MACHINERY.

1 Planer, planes 16 ft. long 72 in. x 72 ft., 2 heads.  
1 Planer, planes 5 ft. 24x24 in.  
1 Planer, planes 6 ft. 32x25 in.  
1 Planer, planes 8 ft. 30x30 in.  
1 Planer, planes 4 ft. 24x24 in. [not screw cut]  
1 Engine Lathe, 9 ft. bed, 28 in. swing screw feed  
1 Engine Lathe, 12 ft. bed, 22 in. swing.  
1 Engine Lathe, 12 ft. bed, 22 in. swing.  
1 Lathe, Boring and Turning, 15 ft. bed, 84 in. swg.  
1 Engine Lathe, 20 ft. bed, 24 in. swing, A1.  
1 Engine Lathe, 11 ft. bed, 22 in. swing.  
1 14 ft. Vertical Boring Mill.  
1 26-in. Stevens' Pulley Lathe.  
1 Automatic Rack-Cutting Machine.  
1 20 in. stroke Friction Shaper.  
1 175-lb. Power Lift Drop Hammer.  
1 17 ft. 24 in. Stover Dimension Planer.  
Send for list Second-hand tools.

## NEW YORK MACHINERY DEPOT,

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## MACHINERY IN STOCK.

**ENGINE LATHES.**—62 inches x 22 feet;  
85 in. x 31 ft.; 50 in. x 20 ft.; 48 in. x 18 ft.; 42 in. x 12 ft.; 32 in. x 12 ft.; 29 in. x 15 ft.; 24 in. x 28 in. x 20 ft.; 1 each 24 x 10 ft., 12 ft. and 16 ft.; 1 each 17 in. x 6 and 8 ft.; 1 each 16 in. x 6, 8 and 10 ft.; 1 each 14 in. x 6 and 8 ft.; 6 12 in. x 5 ft.; 2 each 11 in. x 4 and 5 ft.; 2 each 10 in. x 4 ft., power or foot-power; 1 16 in. x 6 ft., 15 in. x 6 ft. 14 in. x 5 ft. Fox Monitor Lathes; 1 15 in. x 6 ft. Square Arbor Fox Lathe; 1 each 12 in. x 5 ft., 14 in. x 6 ft., 15 in. x 6 ft., 18 in. x 6 ft. Turret Lathe; 1 each 14 in. x 6 ft., 16 in. x 6 ft., 18 in. x 6 and 8 ft. 21 in. x 8 and 10 ft. Engine Lathe Taper.  
1 Iron Planer, 16 in. x 16 in. x 4 ft.  
1 Planer, 20x20 in. x 4 ft. and 22x22 in. x 5 ft.  
1 " 24x24 in. x 5 ft. and 6 ft.  
1 " 30x30 in. x 6 ft.  
1 " 32x32 in. x 10 ft. 42x36 in. x 12 ft.  
1 " 36x28 in. x 10 ft.  
1 " 44x44 in. x 22 ft. and 50x50 in. x 17 ft.  
1 " 30x30 in. x 9 ft., with one head.  
1 " 42x42 in. x 12 ft., with two heads  
Friction Shapers, 15 in., 22 in., 32 in.  
Crank Shapers, 12, 13, 15, 17, 20, 24, 28 in. adj. st'ke  
1 each Nos. 1, 2, 3, 4 Wire Feed Screw Machines.  
1 each Nos. 5 to 8 Screw Machine. Power Feed.  
1 each 2, 3, 4 and 6 Spindle Gang Drills.  
2 Crank Planers. 12 No. 7 Lincoln Pat. Millers.  
1 each Nos. 31, 32 and 33 Ferracute Presses.  
1 No. 3 Stiles & Parker Geared Press.  
1 No. 3 1/2 in. Fowler Press. 10 Foot and Power  
1 No. 1 Bliss Foot Presses. [Presses].  
12 Punching and Shearing Machines, assorted.  
1 Bolt Cutter, each 1/2 to 1 in. and 3/4 to 2 in.  
1 36 in. Gear Cutter.  
1 each 48, 60 and 72 in. Radial Drill.  
1 New Horizontal Boring Machine with facing attachment. Newark Mach. Tool Co., makers.  
1 48 in. Gear Cutter. 1 Power Mortising Machine.  
1 50 in. Pulley Lathe. 2 Profiling Machines.  
1 10x12 in. Valley Automatic Engine.  
1 36 in. Upright Drill. 3 Cam Cutters.  
Send for List of New and Second-Hand Machinery.

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59 S. Canal St., Chicago. 115 S. Liberty St. N. Y.

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Passenger and Freight

## CARS,

Both New and Second-Hand.  
IMMEDIATE DELIVERY.

Low Prices. Easy Terms.

## BARGAINS—SECOND-HAND TOOLS.

We have the following second-hand Machine Tools, taken mainly in exchange for those of our manufacture. We will sell them low.  
17 in. x 8 ft. Putnam Lathe. Good Order.  
18 in. x 6 ft. Engine Lathe. Good Order.  
18 in. x 10 ft. Engine Lathe. Good Order.  
20 in. x 12 ft. Ames Lathe. Good Order.  
1 24 in. x 8 ft. L. W. Pond Lathe. Good Order.  
1 32 in. x 32 in. x 8 ft. and 9 ft. L. W. Pond Planer. G. O.  
24 in. x 16 ft. Lathe. Fair Order.  
10 in. Traveling Head Shaper. Good Order.  
24 in. x 24 in. x 4 ft. Planer. Good Order.  
32 in. x 32 in. x 8 ft. L. W. Pond Planer. Good Order.  
36 in. x 36 in. x 7 ft. Mattawan Planer. Good Order.  
1 24 in. Hendey Drill Press. Good Order.  
1 24 in. B. G. P. F. Drill Press. Good Order.  
1 24 in. Plain Drill Press. Good Order.  
1 34 in. Drill Presses. Good Order.  
2 36 in. B. G. Drill Presses. Good Order.  
2 36 in. B. G. New Haven Drill Presses. G. O.  
1 2 1/2 in. Acme Single Drill Press. Good Order.  
2 750-lb. Steam Hammers (Bement, Miles & Co.) Good Order.  
1 Punch, 18-in. throat, to punch 1 in. hole in 3/4-in. iron. At Order.  
1 Plain Milling Machine. Good Order.  
1 Niles Universal Miller, 6-in. Univ. chuck fitted. Good Order.

We have in stock or in process of construction at our Works a full line of Engine Lathes, Planers, Crank and Geared Shapers, Drill Presses, Improved Cabinet, Fox, Monitor, Square Arbor and Turret Chucking Lathes, Valve Millers, Cock Grinders, Slide Rests, etc.  
Our Stock is constantly changing.  
Write for full particulars and prices.  
Outfits a specialty.

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50 to 100 Horse-Power,

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general machinery in stock at low prices. Every

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ONE SYSTEM  
Cotton Yarn Machinery

IN EXCELLENT CONDITION.

One 40-in. 2 Beater Breaker Lapper.  
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Ten 40x48-in. Full Roller Cards, with quick  
Combs and Coilers; 1000s to each table, 4  
delivery each head, with Coilers.  
Two 50-spindle Slubbers, 100s.  
Six Fine Speeders, 73 1/2; 3 of 132 spindles; 2 of  
144 spindles, and 1 of 120 spindles.  
Twenty-four Spinning Frames, 1 1/2-in. Ring,  
double adjustable, 6-in. Traverser, Doyle Separators,  
Jencks Clearer, Short Boss Roll.  
Two 100 spindle Spoolers.  
Five Twisters, 120 spindles each, 2 1/2-in. ring.  
Five Draper Reels.  
One Press.  
All in excellent condition.  
For particulars address.

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26 Exchange Pl., room 5, PROVIDENCE, R. I.

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Two New Lewis Improved Bolt Headers at low

figures. Guaranteed fully.

A

Set Spoke Machinery, mostly Gleason &amp; De-

fiance make. Complete order; used less than four

months; very low figure.

N

Boiler Feed Pump; \$30 delivered; good work-

ing order. Knowles.

S

Twenty-ton Crane; used but forty-eight hours,

when was replaced by larger. Will sell one-third

cost in Sharon, Pa.

F

Half ton assorted sizes, Mushett Steel in the

South, owned by Nail Works, shut down and

selling off.

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New Haven 60 in. Pulley Lathe, 10 ft. bed,

claimed to be as good as new, near New York.

E

Two 26 in. Laundry Extractors; new, perfect,

guaranteed; \$75 each, f. o. b., New York.

L

Ten new Road-Making Machines at a sacrifice,

to close out stock; guaranteed, \$90, f. o. b.

D

Two three horse-power and three three horse-

power Upright Steam Engines; all new and

guaranteed.

H. H. MANSFIELD,

126 Liberty Street. NEW YORK.

## Machinery, New and Second-Hand For Sale.

90 in. swing, 30 ft. bed.  
50 in. swing, 30 ft. bed, for rolling mill forg's, new.  
30 in. swing, 28 ft. bed, Pond Machine Tool Co.  
Shafting Lathe. A1.  
32 in. swing, 12, 14, 16, 18 ft. beds. New.  
28 in. swing, 12, 14, 16, 18 ft. beds. New.  
25 in. swing, 10 ft. Pratt & Whitney.  
24 in. swing, 12, 16, 20 and 24 ft.  
21 in. swing, 10 and 12 ft. beds. New.  
20 in. swing, 7 1/2 ft. bed. Ames. Good.  
18 in. swing, 8 ft. bed. Several makers.  
16 in. swing, 6 and 8 ft. beds. Several makers.  
15 in. swing, 6 and 8 ft. beds. Several makers.  
14 in. swing, 6 ft. bed. Several makers.  
15, 18 & 25 in. st'ke. Crank shapers, step-toe. New.  
20, 26 & 30 in. stroke. G'rd shapers, step-toe. New.  
10x16 in. stroke. Crank shapers. Good order.  
24 in. stroke. Geared shapers. Good order.  
20 in., 22, 24, 28, 30, 36 in. Drills. New & 2d-hand.  
22 in. x 5 ft. Planer.  
24 in. x 4 ft., 5 ft., 6 ft. Planers.  
26 in. x 6 ft. Planers. 36 in. x 12 and 14 ft. Planers.  
54 in. x 24 in. x 2 1/2 ft. Planers.  
62 in. x 10 1/2 ft. Planer. Bement. A1.  
62 in. x 18 in. x 17 ft. Planers.  
72 in. x 28 in. x 33 ft. Planer, two hd's and Aux. Post.  
40 h-p. Vertical Engine. N. Y. S. S. P. Co. A1.  
11x18 horizontal slide valve Engine.  
1,100 and 3,000-lb. BEMENT STEAM HAMMER.  
Car-axle Lathe, Bement 1 1/2 and 1 3/4 Bolt Cutters.  
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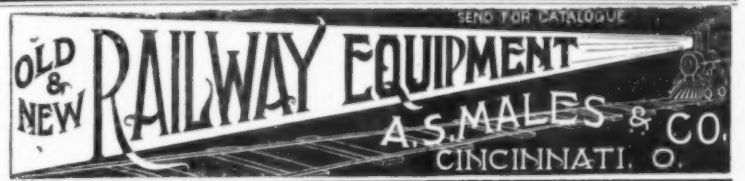
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On SATURDAY, JANUARY 21 1893, at 10 o'clock A. M., on the premises, for account of whom  
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Consisting of Tubular and Sectional Boilers, about 4,000 h. p.; Engines, 1 to 40 h. p. each; large  
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with engines. Westinghouse Dynamo, 20 Arc light; Tanks of various sizes, Lathes and Drills,  
large quantity of piping and valves, wrought and cast iron, wrought iron smoke stacks. All shaft,  
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**RAILWAY EQUIPMENT.**  
**STEEL RAILS TRACK SUPPLIES**

## SOUTHERN LUMBER DIRECTORY.

A List of Leading Lumber Dealers and Manufacturers in the South.

This list of representative Southern lumber merchants and manufacturers is published for the benefit of those who desire to reach responsible houses in this branch of business in the South. Readers of the MANUFACTURERS' RECORD who have occasion to correspond with any of the firms mentioned below will confer a favor by mentioning this paper.

## Yellow Pine.

I. B. Gordon & Co., Alpine, Ala.  
Villa Rica Lumber Co., Anniston, Ala.  
J. R. Adams & Sons, Birmingham, Ala.  
Hawkins & Smith, Birmingham, Ala.  
C. T. Hughes & Co., Birmingham, Ala.  
Riddle & Simpson, Birmingham, Ala.  
Southern Supply Co., Birmingham, Ala.  
Marbury & Jones, Roseman, Ala.  
D. W. & U. Blacker, Brewton, Ala.  
W. W. Weaver, Castleberry, Ala.  
J. A. Dudley, Clanton, Ala.  
O. A. Duke, Clanton, Ala.  
L. B. Wells, Clanton, Ala.  
H. C. Hignman & Co., Decatur, Ala.  
Dunham Lumber Co., Dunham, Ala.  
Thos. Taylor, Escatawpa, Ala.  
W. J. Williams & Son, Eustis, Ala.  
Gadsden Lumber Co., Gadsden, Ala.  
Tuscaloosa Lumber Co., Hull, Ala.  
Downing & Scott, Kirkland, Ala.  
Bay City Lumber Co., Mobile, Ala.  
E. B. Vaughan, Mobile, Ala.  
Alabama Lumber Syndicate, Montgomery, Ala.  
S. B. Allen & Co., Montgomery, Ala.  
W. A. Drives & Co., Montgomery, Ala.  
Moore, Kirkland & Co., Montgomery, Ala.  
John Crosby, Pansey, Ala.  
S. A. Blasingame, Verbena, Ala.  
Wagar Lumber Co., Wagar, Ala.  
W. W. Wadsworth, Wadsworth, Ala.  
Arkadelphia Lumber Co., Arkadelphia, Ark.  
Empire Lumber Co., Ashton, Ark.  
Long Bell Lumber Co., Buckner, Ark.  
Cotton Belt Mill Co., Cotton Belt, Ark.  
Eagle Lumber Co., Eagle Mills, Ark.  
Red River Lumber Co., New Lewisville, Ark.  
A. J. Neimeyer Lumber Co., Waldo, Ark.  
Fordyce Lumber Co., Fordyce, Ark.  
The Florida Phosphate Co., Ltd., Phosphoria, Fla.  
J. S. Betts & Co., Ashburn, Ga.  
Gress Lumber Co., Atlanta, Ga.  
Wilson Coal & Lumber Co., Atlanta, Ga.  
Donelson Lumber Co., Donelsonville, Ga.  
Perkins Manufacturing Co., Augusta, Ga.  
Stillwell, Millen & Co., Savannah, Ga.  
E. B. Hunting & Co., Savannah, Ga.  
Georgia Lumber Co., Savannah, Ga.  
F. F. Putney, Hardaway, Ga.  
Charles Bewick & Co., Hazelhurst, Ga.  
Alderfer & Bull, Isabella, Ga.  
Hogan & Winger, Kensington, Ga.  
J. A. Williams, Sumner, Ga.  
A. J. Duncan & Co., West Bowersville, Ga.  
W. E. Mayne, Carpenter, Ky.  
P. Hendrickson, Conant, Ky.  
Perkins & Miller Lumber Co., Ltd., Westlake, La.  
Lock-Moore & Co., Ltd., Westlake, La.  
R. J. Aycock, Longstreet, La.  
C. P. Brasher, Marthville, La.  
Joseph Horst, Maudensville, Md.  
Elliott, Crawford & Co., Myrtle, Miss.  
P. B. Myers & Son, Myrtle, Miss.  
Ocean Springs Lumber Co., Ocean Springs, Miss.  
B. J. Cansey, West, Miss.  
Cary E. Spence, Pass Christian, Miss.  
Keystone Lumber & Imp. Co., Bogues Chitto, Miss.  
J. S. Blackburn, Ellisville, Miss.  
W. L. Rankin & Bro., Shannon, N. C.  
A. E. Rogers, Mullins, S. C.  
R. F. Moss, Booker, Va.  
The A. F. Withrow Lum. Co., Millboro Depot, Va.  
U. B. Simpson & Son, Naruna, Va.

## North Carolina Pine.

Page Lumber Co., Aberdeen, N. C.  
The Greenville Land & Imp. Co., Greenville, N. C.  
Guilford Lumber Mfg. Co., Greensboro, N. C.  
Goldsboro Lumber Co., Goldsboro, N. C.  
G. Vyne & Son, Wilkesboro, N. C.  
John Hickson & Co., Lynchburg, Va.

## Cypress.

Morris & England, Keo, Ark.  
Cypress Lumber Co., Sherrill, Ark.  
T. O. Wilson Lumber Co., Tillar, Ark.  
Nuchner & Brown, Peach Orchard, Ark.  
Moline Lumber Co., Helena, Ark.  
J. M. Milburn & Bro., Greenway, Ark.  
J. C. McCain, Greenway, Ark.  
W. R. Emerson, Emerson, Fla.  
J. C. Burleigh, Midland, Fla.  
F. S. Bamberg, Jasper, Fla.  
S. J. Temple, Temple's Mills, Fla.  
J. P. Little, Sumner, Fla.  
Geo. H. Barker, Waldo, Fla.  
A. A. Bunnell, Raulerson, Fla.  
Windemere Land & Lumber Co., Windemere, Fla.  
Kelly, Cosby & Co., Jug Tavern, Ga.  
Dietrich & Dopson, Lenox, Ga.  
W. T. McArthur, McArthur, Ga.  
W. H. Moxley & Co., Macon, Ga.

W. R. Peterson & Co., Wadley, Ga.  
Lawless & Kyle, Franklin, La.  
Louisiana Cypress Lumber Co., Harvey, La.  
Callahan & Lewis Mfg. Co., Patterson, La.  
McEwen & Murray, New Orleans, La.  
Hanson & Smith, Wilmington, N. C.  
J. C. Fulton, Aransas Pass, Texas.  
Calcasieu Lumber Co., Austin, Texas.  
M. T. Jones & Co., Childress, Texas.  
J. H. Folkey, Korville, Texas.

## Hardwoods.

North Alabama Lumber Mfg. Co., Bridgeport, Ala.  
Bridgeport Lumber Co., Bridgeport, Ala.  
Hill & Mitchell, Center Star, Ala.  
W. A. Koepfel, Coaling, Ala.  
Decatur Lumber Co., Decatur, Ala.  
H. S. Freeman, Decatur, Ala.  
Black Warrior Lumber Co., Demopolis, Ala.  
Alabama Lumber & Mfg. Co., Gurley, Ala.  
G. Vaughan, Hollywood, Ala.  
C. G. Huffman, Hollywood, Ala.  
Clifton & Hendrix, Jasper, Ala.  
Elliott & Carter, Jasper, Ala.  
W. M. Beatty, Austin, Ala.  
J. W. Ray, Arkadelphia, Ark.  
Desha Lumber Co., Arkansas City, Ark.  
Batesville Lumber Co., Batesville, Ark.  
Russell & Elder, Beebe, Ark.  
South'n Hardwood Lumber Co., Black Rock, Ark.  
E. M. Ford Land & Timber Co., Gilmore, Ark.  
Kelley & Wells Lumber Co., Newport, Ark.  
Cream City Lumber Co., Lamberthville, Ark.  
J. M. Meffert, Lowell, Fla.  
Ray & Geise, Brownwood, Ga.  
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Glasgow & Henderson, Cassville, Ga.  
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Greer Bros., Ada, Ga.  
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H. E. Miller, Lewisburg, Ky.  
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J. C. Williamson, Mouth of Pond, Ky.  
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Waters & Bringham, Pineville, La.  
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John Hoagland, Spring City, Tenn.  
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Smith & Co., Reedy Ripple, W. Va.  
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Mountain & Sons, Mobile, Ala.  
C. G. Richards & Son, Mobile, Ala.  
Stewart & Butt, Mobile, Ala.  
Gulf States Lumber Co., Montgomery, Ala.  
D. Goulet & Co., Black Rock, Ark.  
F. McKay, Black Rock, Ark.  
Camden Shingle Mill Co., Camden, Ark.  
Price Lumber Co., Paragould, Ark.  
Carey & Ollinger, Bagdad, Fla.  
A. L. Wellman & Co., Beresford, Fla.  
Florida Shingle Mills, Brooksville, Fla.  
W. Springstead & Son, Brooksville, Fla.  
Mearns Shingle Mill, Davenport, Fla.  
Wm. A. McCann, Jacksonville, Fla.  
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Little & Chapman, Rosewood, Fla.  
Atlanta Lumber Co., Atlanta, Ga.  
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King & Bursch, Hawkinsville, Ga.  
Yarbrough & Perry, Fullington, Ga.  
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Mayfield Shingle Co., Wishart, Ga.  
Worth Lumber Co., Worth, Ga.  
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Monroe Smith, McKinney, Ky.  
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Harris & Thornton, Chattanooga, Tenn.  
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Arkansas Stave Works, Greenway, Ark.  
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Lester & Little, Sloans Valley, Ky.  
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For the convenience of the many readers of the MANUFACTURERS' RECORD it has been deemed advisable to collect under this head a reliable list of Realty Agencies of the Southern States. The value of such a list for the purpose of Ready Reference will immediately become apparent to all who are interested in the growth of this section.

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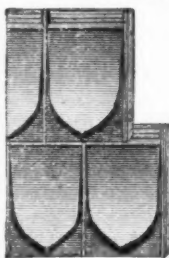
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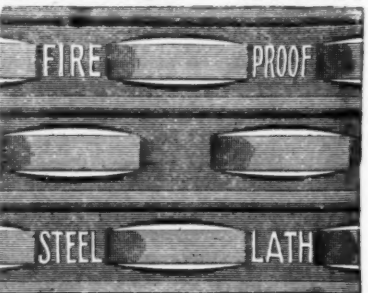
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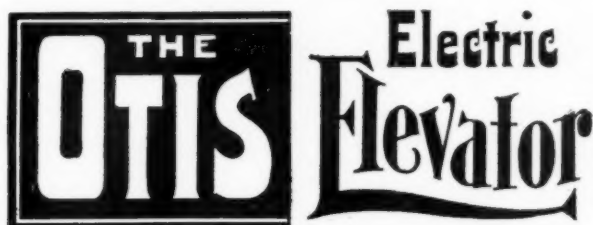
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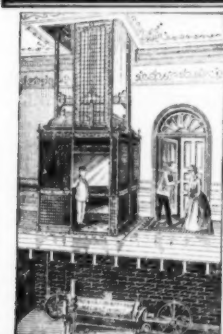
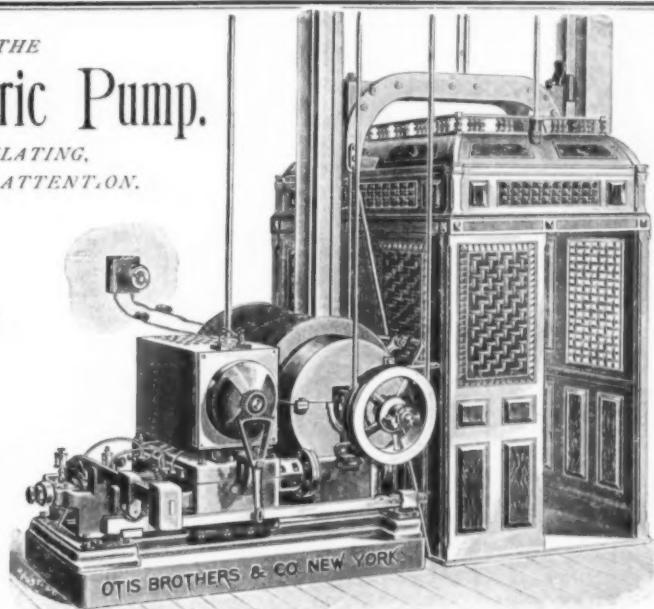
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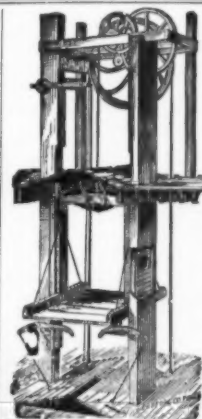
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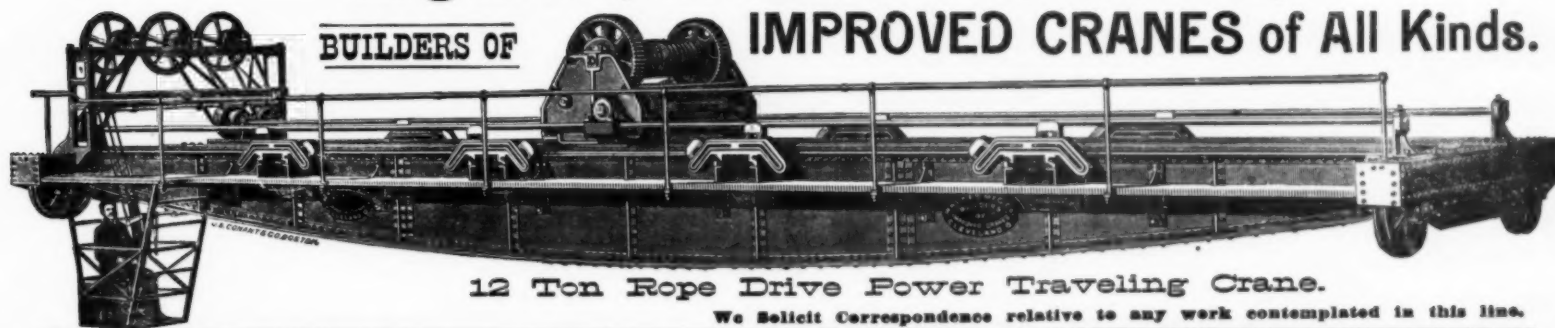
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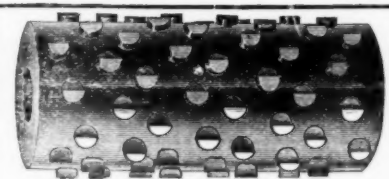
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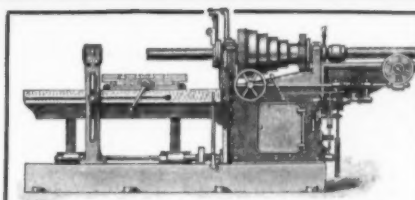
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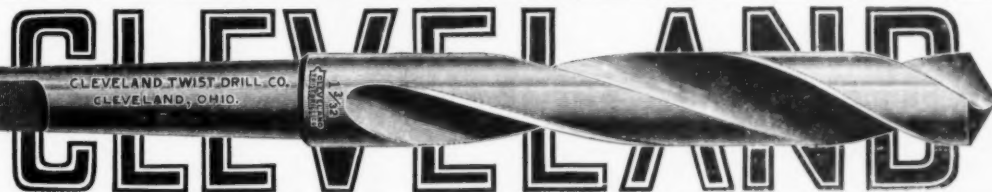
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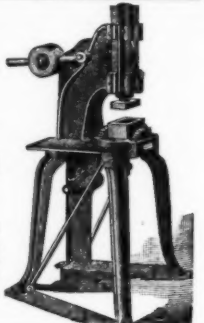
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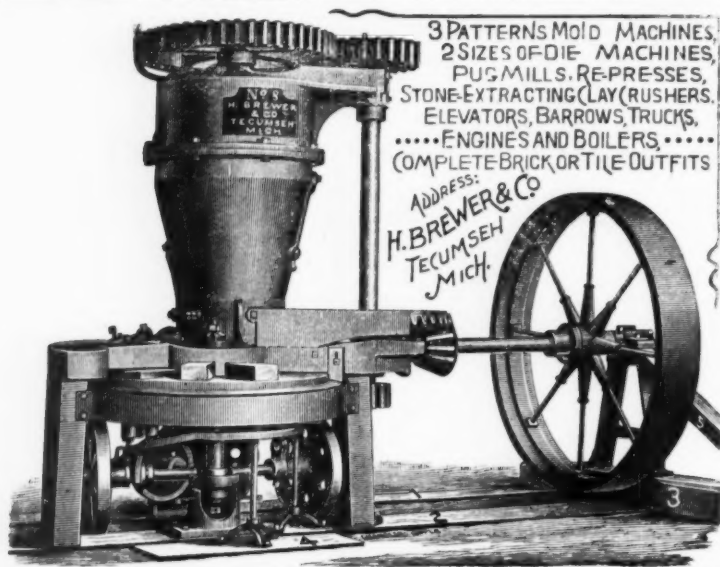
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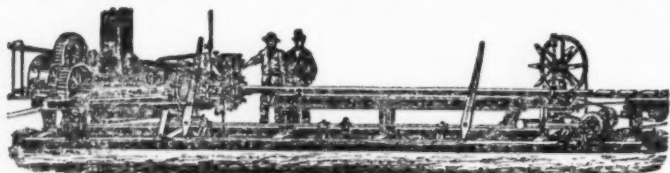
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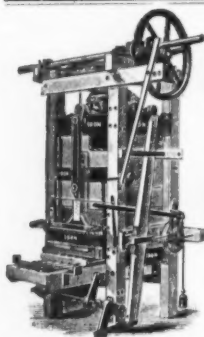


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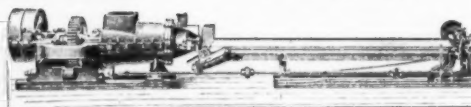
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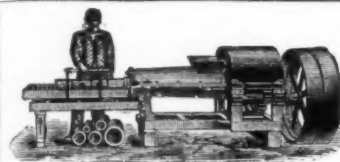
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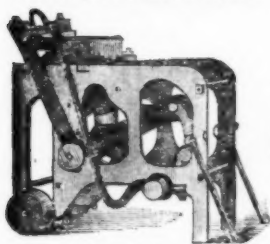
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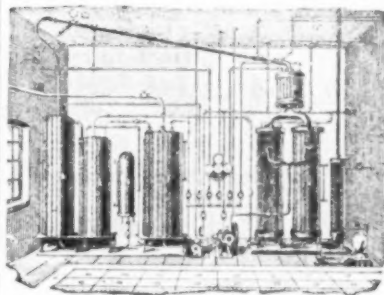
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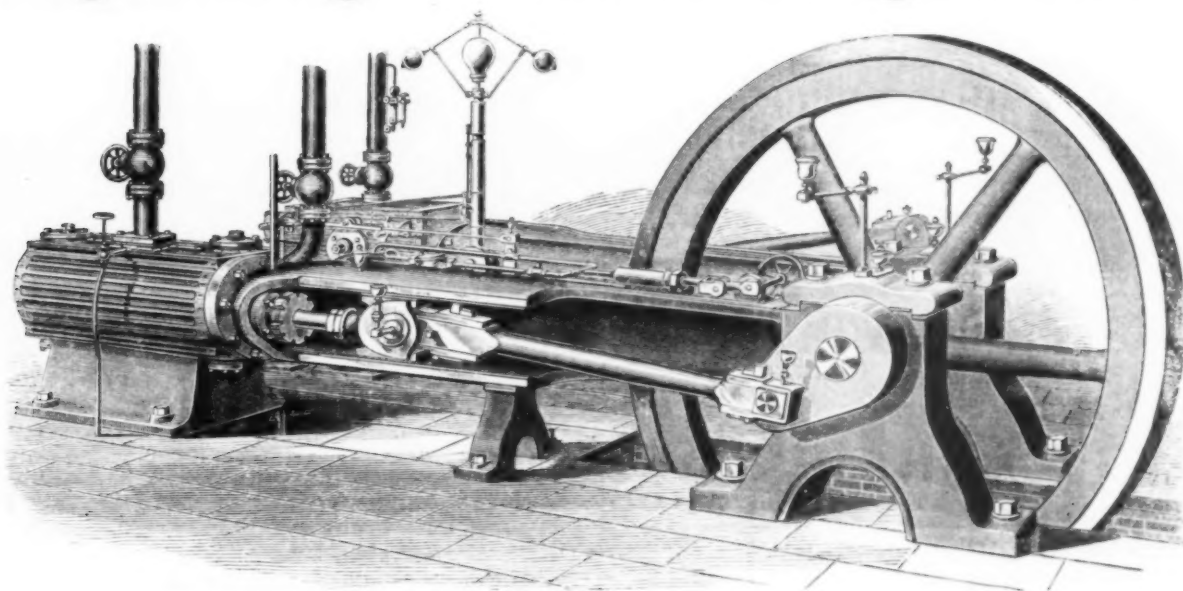
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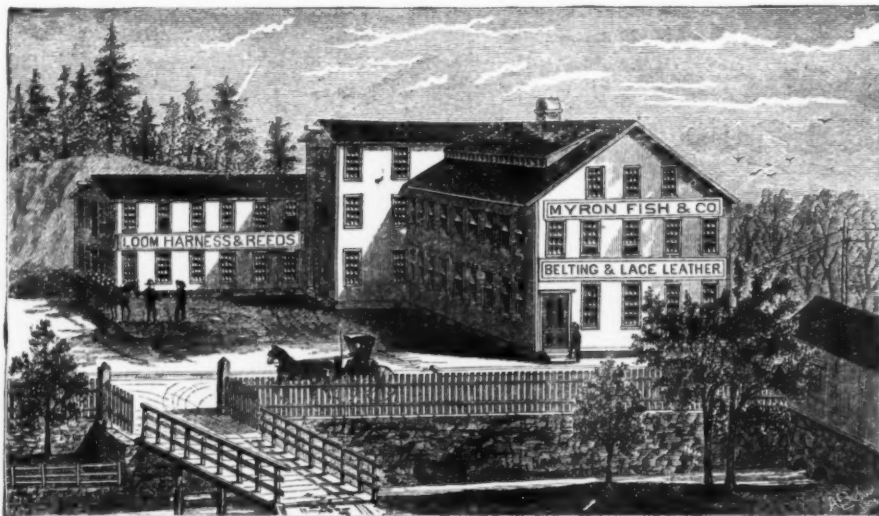
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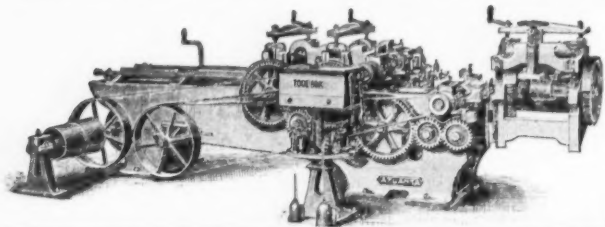
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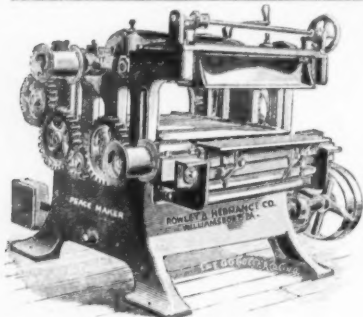
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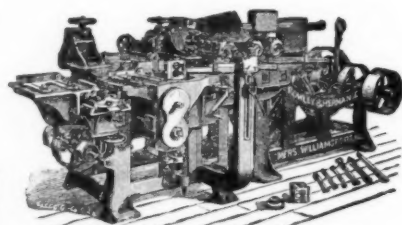
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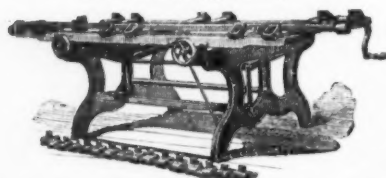
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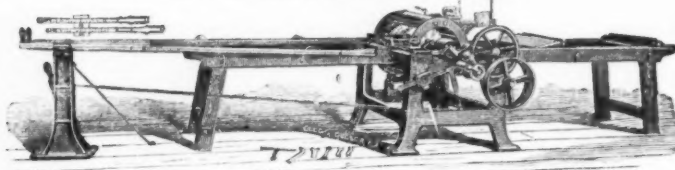
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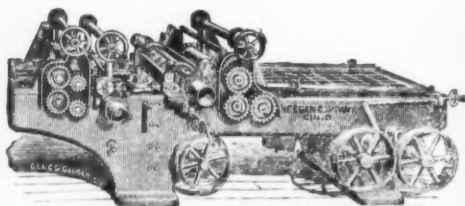
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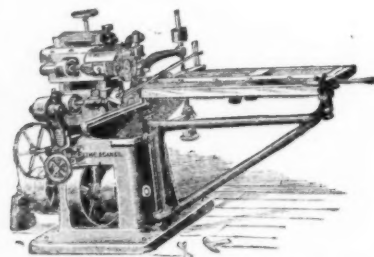
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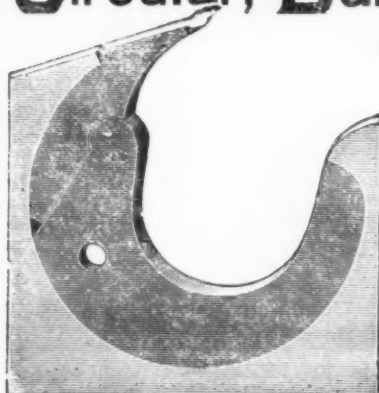
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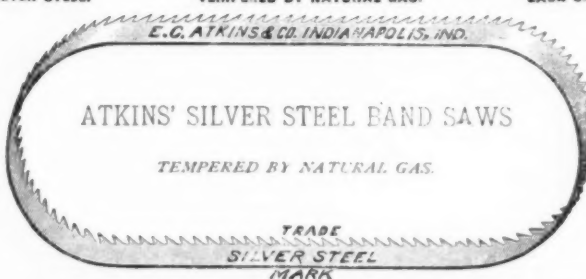


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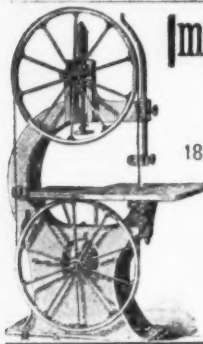


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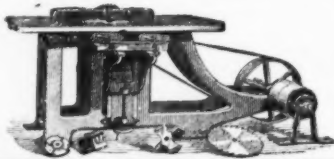


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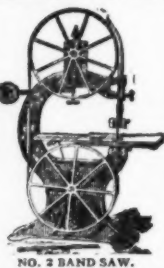


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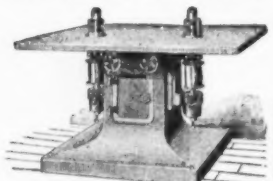
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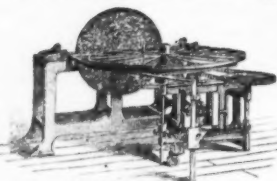
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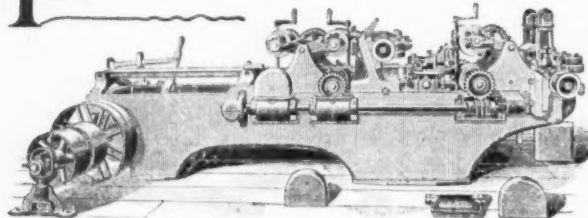
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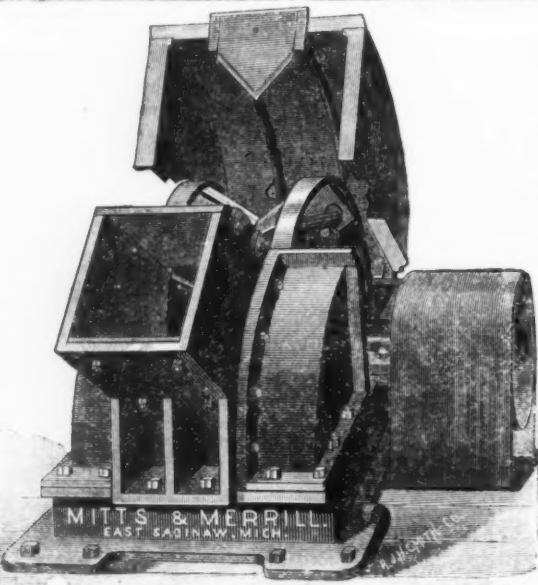
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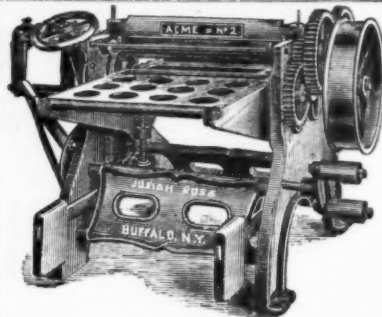
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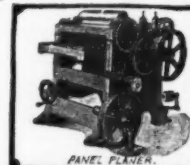
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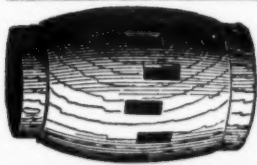
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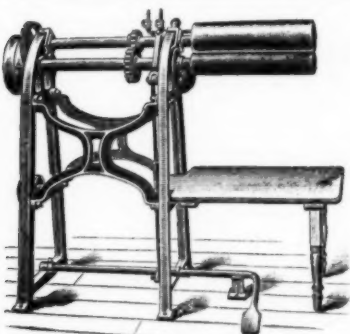
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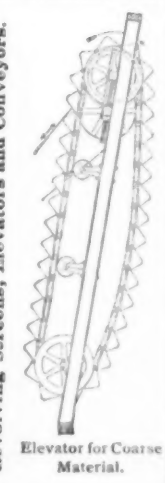
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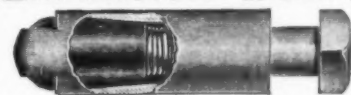
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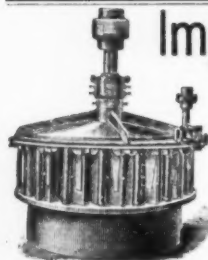
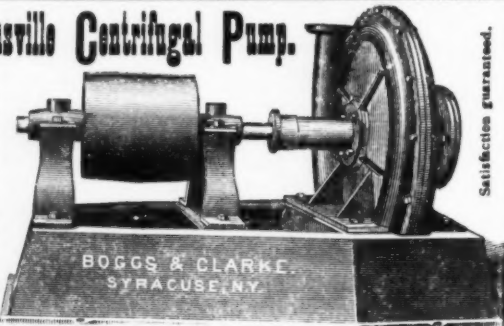
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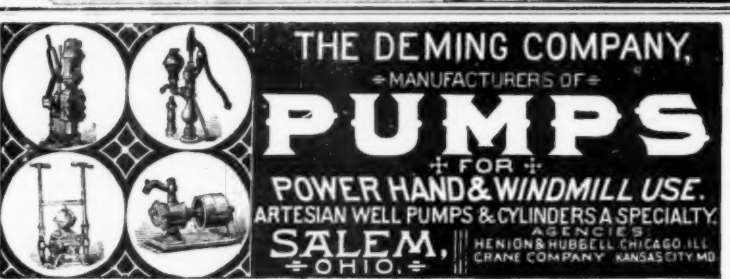
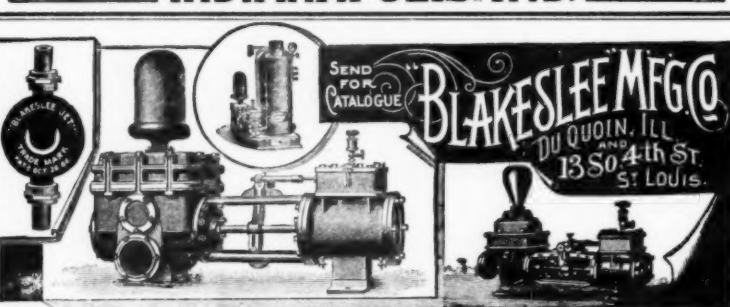
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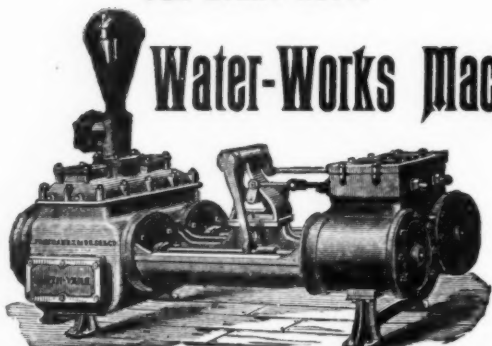
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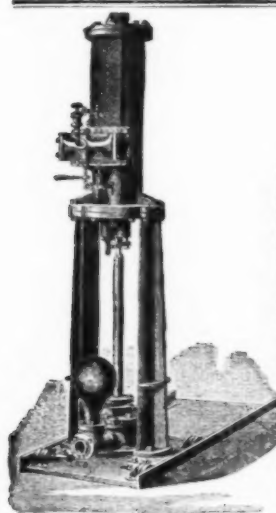


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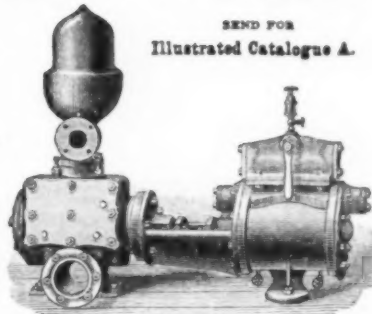




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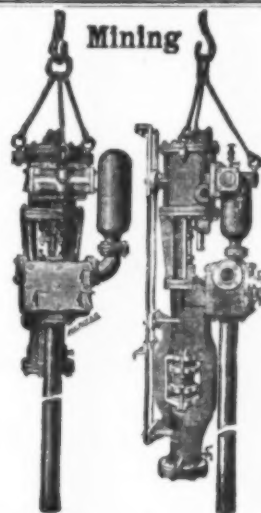
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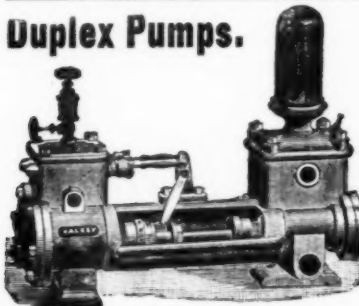
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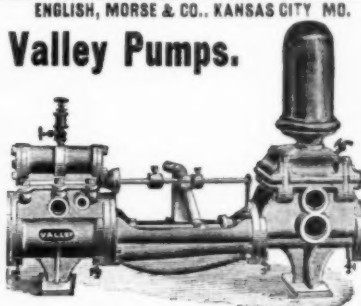
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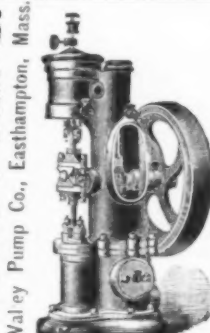
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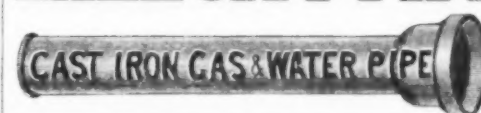
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Successors to D. GILES & CO., Chattanooga, Tenn., Manufacturers of



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Castings & Patterns  
of Every Description Made  
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FOR WATER WORKS, GAS WORKS, CULVERTS.  
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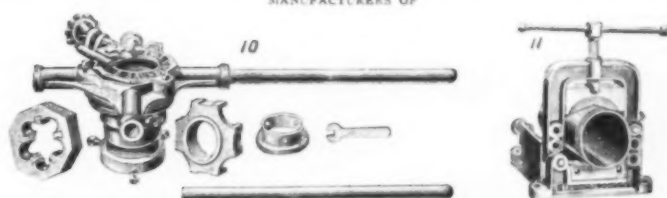


DURING 1892 the Radford Pipe &  
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For LARGE PIPE. These Stocks have CUTTING OFF ATTACHMENT, and both Vises and  
Stocks are MALLEABLE IRON, light, strong and of superior design and finish. Also PIPE  
THREADING MACHINES 1/4 inches to 16 inches, Tapping Machines, &c. Send for catalogue to

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Double and Single Gate, 1/2 inch to 48 inch;  
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# ROCKY MOUNT,

NORTH CAROLINA,

On the Atlantic Coast Line, 125 miles South of Richmond, Va. Offers the most flattering opportunities for business and investment of any town in the South. During the past year the

**POPULATION** increased from 1,194 to 2,500; 185 new dwellings and stores, and seven new Tobacco Leaf Houses have been built. All are occupied and the demand is not half filled.

**ROCKY MOUNT COTTON MILLS** are increasing their capacity from 15,000 to 30,000 spindles, and in the fall will employ 300 additional hands.

**TOBACCO BUSINESS** of the town has more than doubled in capacity. There are three large warehouses and fourteen leaf houses now in operation.

**ATLANTIC COAST LINE RAILROAD** are building their main yards and shops here. Several buildings are under roof, miles of track laid, coal shutes, etc., erected; 200 new hands will be employed this fall; next year three times that number. All this has been accomplished in one year.

**MERCHANTS AND MANUFACTURERS**—Rocky Mount is the most promising point for business in the whole South.

**INVESTORS**—Look at Rocky Mount, the return will be large, sure and quick. For information write

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## THE SOUTH BALTIMORE HARBOR & IMPROVEMENT COMPANY.

THE SOUTH BALTIMORE HARBOR & IMPROVEMENT CO. is the owner of about 1,500 acres of land and five miles of water front adjoining the city of Baltimore, on the south side of the Patapsco River.

### LOCATION.

The land is beautifully located, running from the water's edge, gradually to a height of about 200 feet; is free from malarial influences, and is generally considered one of the healthiest locations adjoining the city.

### WATER FRONT.

The center of the water front consists of the famous land-bound harbor of Curtis Bay, with an average depth of water of 25 feet.

### MANUFACTORIES.

The advantages of this locality for manufacturing purposes cannot be overestimated. The best proof of this assertion is that capitalists have within the last few years selected it in preference for large manufacturing enterprises, such as a Sugar Refinery, Barrel Factory, Car Works, Foundry, Nut and Bolt Manufactory, the Ryan-McDonald Machine Shops, which were removed from Waterloo, N. Y.; the Beckwith Rolling Mills, which were removed from Paterson, N. J., besides others now in contemplation of erection.

### LABOR.

The great advantage of this place as to labor, is the town of SOUTH BALTIMORE, adjoining the factories, containing hundreds of substantial brick houses, for the employees of these various works (There are now being built by the Company, as well as by others, blocks of houses, in addition to the above.)

### BALTIMORE & OHIO R. R. CO.

The Baltimore & Ohio Railroad runs through this property, and has a terminus at Curtis Bay.

### ELECTRIC RAILWAY.

An Electric Railway is now completed from the City of Baltimore to the Sugar Refinery (near the southern limits of this property), the fare upon which will be only five cents, the cars to be run every ten minutes, and thereby making it a part of Baltimore City, as well as easy of access at all hours.

### CHURCHES.

The town contains a Presbyterian, a Catholic, a Methodist, a Baptist and an Episcopal Church.

### BUILDING LOTS.

Capitalists and Builders to erect houses in this growing town, both for sale or to rent, will find a rare opportunity for investment: as the demand for houses is greater than the supply.

The Company will sell or lease water fronts, or lots for manufacturing and for dwelling purposes, at moderate rates.

Manufacturers will find it to their interest to examine this property before locating elsewhere.

For particulars and prices, apply to

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To Manufacturers of Hardwoods.

To Manufacturers of Brick.

To Manufacturers of Cotton.

To Prospective Manufacturers Looking Toward the South to Locate,

AND

TO CAPITALISTS.

# WASHINGTON

LOUISIANA.

A CITY OF 1,800 PEOPLE.

Offers More Practical and Substantial Inducements Than Any Other Town in the South.

**First.**—At the very doors of Washington are VAST VIRGIN FORESTS of Hickory, Oak, Walnut, Magnolia, Cypress, and every variety of the Finest Hardwoods, so easy of access that Black Walnut and Hickory are cut for cordwood. The forests are practically inexhaustible, extending for 100 miles along the Bayou Courtableau, Bayou Cocodrie and Bayou Bouef, upon which waterways Washington is situated. Magnificent opportunities for hardwood manufacturing exist at Washington.

**Second.**—Washington already possesses such industries as:

- A Large Cotton Factory (cost \$50,000.)
- A Saw Mill.
- A Drain Pipe and Tile Works.
- A Steam Brick Mill.
- An Oil Factory.
- Three Cistern Factories.
- A 100-saw Cotton Gin.
- A Sash and Blind Factory.
- Fifteen Large General Stores.

Churches, Schools and every advantage of an old-established town.

**Third.**—Washington is AT THE HEAD OF NAVIGATION of Bayou Courtableau, and enjoys cheap transportation by water to New Orleans, the East and West, and low freights by both water and rail via the Southern Pacific Railway, which runs through the town. The cost of raw material and the finished product is thus reduced to a minimum, and the saving on Northern and Western freights alone make a profit of 10 to 25 per cent. to manufacturers located here.

**Fourth.**—Washington is situated in St. Landry Parish, adjoining the famous Teche Sugar Country, and every diversity in crops is grown. Some of the largest sugar plantations in Louisiana adjoin Washington, and rice, cotton, corn and oats yield enormous crops.

**Fifth.**—Labor in abundance is available for small manufacturing plants at very low cost.

## WASHINGTON INVITES INQUIRIES.

For detailed information regarding its advantages and inducements for new industries address

**LEON WOLFF, Mayor, Washington, La.**

**HOTEL, Overlooking Central Park,**  
Fifth Avenue  
58th and 59th  
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The Highest  
Class.

The water and ice used are vaporized and frozen on the premises, and certified to as sanitary by Prof. Chas. F. Chandler.

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GOLD,  
COPPER,  
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TIN,  
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COAL,  
NICKEL,  
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ASBESTOS,  
LITHOGRAPHIC  
STONE,  
GYPSUM,  
DOLomite,  
SAPSTONE,  
PHOSPHATE  
OF LIME,  
TALC, ETC.,  
For Sale.

## FREE SITES & BUILDINGS

FOR LEGITIMATE MANUFACTURERS!

DO YOU wish a better location for your plant than the one you occupy at present?

DO YOU desire factory sites and buildings erected after your own plans and specifications as a donation?

WE OFFER YOU a choice of locations in ILLINOIS, OHIO, INDIANA, &c., also in the cities of CHICAGO, MILWAUKEE, ST. PAUL, DULUTH, &c., with lowest freight rates to and from all points.

ADDITIONAL CAPITAL ALSO PROVIDED  
WRITE FOR PARTICULARS  
YOUR BUSINESS WILL BE TREATED CONFIDENTIALLY AND PROMPTLY.

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**CHARLES F. CLARK, President.**

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Highest grade Instruments manufactured. Endorsed and preferred by the best schools and musical authorities. Only Upright Piano on the market to-day equal to the Grand. Reasonable terms. Old pianos taken in exchange. Pianos for rent. A large assortment of Organs constantly on hand. Send for illustrated piano and organ catalogue. Inducements on second-hand Pianos.

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What is more acceptable than  
AN ESTEY ORGAN, AN AELIAN,  
A WEBER, A DECKER BROS.,  
ESTEY, FISCHER or an  
IVERS & POND PIANO?

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A VIOLIN, A CORNET, A FLUTE,  
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The Illinois Central Railroad Company is desirous of calling the attention of capitalists and manufacturers to the advantages possessed by the different cities and towns on their Southern Lines and on the lines of the Yazoo & Mississippi Valley Railroad Company in the shape of

## UNLIMITED RAW MATERIAL PROXIMITY TO MARKETS, CHEAP LABOR,

Fuel, etc., and believes that it needs but a presentation of their merits to attract the careful attention of all interested in converting the raw materials to be found on their lines into the finished product. Prominent among these are cotton, hard and soft wood, clay, fruits, vegetables, etc. A descriptive pamphlet of 150 pages, entitled "Where to Locate New Factories" has been issued by the Company, and a copy will be sent free on application to the undersigned, who will also give any further information as to

## INDUCEMENTS OFFERED

by the different localities for desired industries. Individuals or companies wishing to embark capital in cotton, clay, woodworking, canning or other industries, can find a profitable field and heavy operation. For particulars address GEO. C. POWER, Industrial Commissioner I. C. R. R., 58 Michigan Avenue, Chicago.

## FURNESS, WITHY, & CO., LTD.

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REGULAR SAILINGS

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FOR LIVERPOOL.

S.S. ISTRAN	4,000 tons
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Write for Samples and Prices.

## RICHMOND AND YORK RIVER LINE.

On and after MONDAY, February 20, 1893, the steamers of this line leave Baltimore daily (Sunday excepted) at 5 P. M. for West Point, Richmond and the South, arriving at Richmond at 9.10 A. M., connecting with trains of the Richmond & Danville System. Steamer leaving Mondays, Wednesdays and Fridays calling at Gloucester Point and Allmond's Wharf; steamer leaving Tuesdays, Thursdays and Saturdays calling at Yorktown and Clay Bank. Through tickets and bills of lading issued to all points of the Richmond & Danville System. Way freight must be prepaid. Fare to Richmond, first class, \$2.00, second class, \$1.50. Tickets sold and baggage checked at Geigan & Co.'s, 205 East Baltimore Street.

REUBEN FOSTER, E. J. CHISM,  
General Manager. Gen. Freight & Ticket Agt.  
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## THE BAY LINE

FOR

Fortress Monroe, Norfolk and the South.

The Bay Line comprises the New and Elegant Steamers

"VIRGINIA," "CAROLINA" and "FLORIDA."

All the Comforts and Luxuries of a first-class Hotel are afforded the traveler. 8 cabins and elegant Saloons and staterooms for mid-week with an exceptional view to comfort. Unsurpassed Cuisine, which is made a specialty with this line. Elegant service and courteous attention. Steamers leave Baltimore daily (except Sundays) at 9 P. M. At Old Point Comfort is located the splendid HYGIEA HOTEL, a Delightful Resort at all seasons of the year. For tickets and information apply at Company's Office, 157 W. BALTIMORE STREET, BALTIMORE.

Or on Board of Steamers.

D. J. HILL, Superintendent,  
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## THE FAVORITE PASSENGER ROUTE.

## MERCHANTS & MINERS' Transportation Company.

Steamers sail from Baltimore, Md., TO BOSTON, Mass., VIA NORFOLK, every TUESDAY, THURSDAY and SATURDAY at 2 P. M.

Fare—First Class, \$10.00 Round Trip, \$20.00  
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FOR PROVIDENCE, R. I., every TUESDAY and THURSDAY at 2 P. M.

FOR SAVANNAH, Ga., every TUESDAY and FRIDAY at 3 P. M. Fare—First class, \$5.00;

round trip, \$25.00; second class, \$10.00.

Baltimore TO JACKSONVILLE, Fla.—First class, \$20.65; round trip, \$36.30; steerage, \$12.50.

All tickets include meals and stateroom accommodations. Through tickets sold and baggage checked to all points South.

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## ATLANTIC TRANSPORT LINE.

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Calling at Swansea and Philadelphia on the outward passage.

S.S. Minnesota, 5,000 tons.	S.S. Missouri, 4,300 tons
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BALTIMORE STORAGE & LIGHTERAGE CO.

235 La Salle Street, } and } to Fenchurch Street,  
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400 Second Street, Baltimore, Md.

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FROM

BRUNSWICK TO LIVERPOOL AND BREMEN.

The Only South Atlantic Direct Line to European Ports.

SHORTEST ROUTE TO EUROPE.

Commencing September 30th, 1892, the following Steamships will make regular sailings from Brunswick, Ga., to Liverpool and Bremen:

Steamship.	Tons.	Master.
WIVENHOE	1893	CLARK.
HAY-GREEN	1869	ELA; KLAU.
J. M. LOCKWOOD	1774	JENKINS.
STORR-LEE	1734	BALIN.
DEERHILL	1733	BAINBRIDGE.

Additional Steamships will be placed on the line as business warrants.

S. S. DEERHILL will sail from Liverpool for Brunswick September 1st.

S. S. HAY-GREEN will sail from Brunswick for Liverpool September 30th.

Consignments solicited to all points in United Kingdom and Continent of Europe.

For Freight, Passage and general information apply to

THE BRUNSWICK TERMINAL CO.

General Agents, BRUNSWICK, GA.

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By a New Method of Color Printing a faithful reproduction of any desired subject can be made, and so faithful in representation that in reproducing an oil painting the grain even of the canvas can be seen.

The product of this new method is superior to lithography or any other process.

The excellence and cost will be a surprise to those who advertise by means of Lithographs. The following speaks for itself:

OFFICE OF SELMAR HESS, Publisher,

95, 95, 97, 99 PRINCE ST., NEW YORK, Dec. 10, 1890.

Mr. RHODES, President: There was a gentleman in to see me yesterday who is very fond of hunting, and when he saw the picture of "The Two Pointers" he nearly wanted to take it by main force with him, so much did he like it. Now, I would like to know if I can purchase from you one of those prints mounted, but not framed, so that I may present him with a copy of it, and how much you will charge me for same.

SELMAR HESS.

To show the excellence of this new method, we will send any party interested a copy of the picture, "The Two Pointers," by mail for \$1.00. The amount may be sent in stamps. The picture of "The Two Pointers" is a faithful reproduction of an oil painting by a celebrated artist, representing two hunting dogs ready for the word "go." It is well worthy of a good frame.

Correspondence invited from those wanting reproductions of Oil Paintings, Water Colors, Photographs, and all kinds of designs for advertising or other purposes. Fine catalogue work and the illustration of all kinds of books from manuscript a specialty. Also newspaper and advertising cuts furnished on time.

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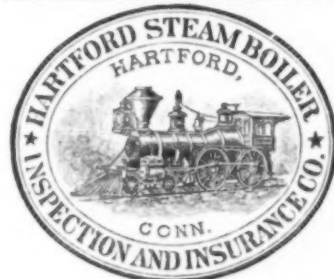
J. E. RHODES, President

New York City.

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Issues Policies of Insurance after Careful Inspection of the Boilers, covering Loss or Damage to Property, and Loss of Life and Personal Injury Arising from Steam Boiler Explosions.

Full information concerning the plan of the Company's operations can be obtained at the COMPANY'S OFFICE, Hartford, Conn., or at any Agency.

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## PREMIER FLOUR OF AMERICA.

Patapsco Flouring Mills.

ESTABLISHED 1774.

Perfection in Flour.

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THE PREMIER FLOUR OF AMERICA.

Is unsurpassed for

BREAD, BISCUIT OR PASTRY.



ASK YOUR GROCER FOR

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Medora, High-Grade Winter Patent.

Patapsco Family Patent.

Orange Grove Extra.

Baldwin Family.

C. A. GAMBRILL MFG. CO.

Office, 214 Commerce Street, Baltimore, Md.

# NORTH WILKESBORO,

## NORTH CAROLINA,

One of the Conspicuous Successes of the Year in Town Building,  
Presents the Following Record:

Population March 4, 1891, actual count, 48.

Population March 4, 1892, actual count, 348.

Gain in one year 625 per cent.

Townsite purchased November 11, 1890; act of incorporation passed by the Legislature, March 4, 1891; first lot sold at private sale, May 12, 1891. Within the first year of its existence ten miles of streets have been graded, and \$22,000 spent in public improvements. Where prior to March 4, 1891, there was only a farm settlement without pretensions to being even a village, there is to-day a thriving, busy, growing, trading and manufacturing center, with

A Large Well-Kept Hotel,  
The Bank of North Wilkesboro, \$40,000 Capital,  
A large Livery and Sale Stable,  
Two Large Wholesale Stores,  
One Hardware Store,  
One Furniture Store,  
Ten General Merchandise Stores,  
Three Saw Mills, Sash and Blind Factories,  
One Foundry and Machine Shop,  
A Handsome, Well-Edited, Home Print Newspaper, The North Wilkesboro News,  
One School,  
Two Churches Under Way,

Two Brick Yards in operation, and a number of other enterprises practically secured.

Arrangements are about completed for a Woolen Mill.

A large iron front brick block, containing Bank Building, two Store Rooms, Opera House, and Printing Office; A graded School Building and an Iron Bridge across the Yadkin River, in the Eastern part of town, will be completed during the spring and summer.

Turnpike roads to Tennessee and Virginia are about completed; county roads leading into town are being improved and numerous good new ones built, with the intention of making this the center for all the wagon trade of this section.

A tobacco warehouse for the sale of the high grade leaf of this district will be built during the summer, so as to give a home market for the tobacco crop that will be grown this year.

*Compare this record with that of any other new tow you have heard of during the past dull season.*

## NORTH WILKESBORO,

Is 75 miles west of Winston-Salem, at the present terminus of the Northwestern North Carolina Railroad, which when ultimately completed to Bristol, Tenn., will give the shortest route between Norfolk and Cincinnati. North Wilkesboro is the most important trading point between Winston-Salem and Bristol, and is in the center of the great undeveloped mineral and timber district of Northwestern North Carolina, being by United States Postal Map on an air line 75 miles southeast of Bristol, 45 miles east of Cranberry, N. C., 40 miles north of Statesville, 45 miles northeast of Hickory, 90 miles northeast of Asheville, 45 miles southeast of Mt. Airy, and 80 miles south of the Norfolk & Western Railroad, in the valley of the Yadkin, between the Brushy Mountains on the South and the Blue Ridge on the North. Climate, healthfulness, water, drainage and location unsurpassed by any town in North Carolina.

The townsite consists of 1,088 acres, located, by the way on a farm originally owned by General John B. Gordon's grandfather. The first public auction sale of lots was held December 2, 1891, and 188 lots were sold. Purchasers have in many cases been able to resell at a handsome profit. The company has sold 50 lots at private sale since then, on many of which houses are now being erected. It is a significant fact that among the business buildings erected a large per cent. are substantial brick structures, while for architectural beauty and cost many of the residences are much superior to those usually found in a town so young.

At the second auction sale, May 11th, 1892, 35 business lots and 44 residence lots sold for \$16,490, an average of \$8.35 per front foot, which is \$2.53 per front foot (or 44 per cent.) more than the average at the sale last December, which was the best sale made in North Carolina during last year. Since the sale, a contract has been closed for the location of another large saw mill, planing mill, sash, door and blind factory combined, which will do a large shipping business. A contract is closed for the location of extract works with a capital stock of \$300,000. The plant will cost \$125,000 and will cover six acres of land. Twelve families from the North will move down. The company will erect a large electric-light plant in connection with the extract works. North Wilkesboro will get there and will not be long doing so.

Through the townsite runs a stratum of serpentine stone, 200 feet in width, and also a bed of iron ore equal in quality to that of Cranberry. The Town Company also owns 4,100 acres of mineral, granite and timber lands in Wilkes County. It is probable that the work of developing the great mineral and timber interests of the section will be commenced in a short time, and on an extensive scale.

*Sites will be donated and stock subscribed to such manufacturing enterprises as may be advantageously located here.*

The policy of the Company is a most liberal one in this respect, it being determined to aid all legitimate enterprises to any reasonable extent. There are 328 miles of water courses within the borders of Wilkes County, furnishing to the vicinity of North Wilkesboro a water power as great as Fall River. The climate, while not moist, is neither harsh nor dry, and is especially suitable to the spinning of fine cotton yarns, such as cannot be made in the extreme South or North. There is also a fine opportunity here for bleacheries, to the establishment of which at Southern points there is a tendency at present. As they can't go where sluggish streams, impregnated with vegetable matter, abound, the quick flowing streams of clear mountain water, so numerous about North Wilkesboro, afford everything desired. Numerous other industries will do well at North Wilkesboro, and will be most substantially encouraged to locate there.

Capitalists, Home Seekers, Health Seekers, Manufacturers of wood and iron, and many other industrial workers may well investigate North Wilkesboro's advantages.

The above-described townsite and other property belongs to the Winston Land & Improvement Co., which was chartered by act of Legislature, session of 1887; ratified March 4, 1887, chapter 82. Authorized capital \$1,000,000. Present capital stock \$125,000, all subscribed and paid up.

**OFFICERS**—G. W. HINSHAW, President, of Hinshaw & Medearis, Wholesale Merchants; Vice-President People's National Bank, Winston, N. C. DR. W. L. BROWN, Vice-President, of Brown Brothers, Tobacco Manufacturers, Winston, N. C. W. F. TROGDON, Secretary and Treasurer, North Wilkesboro, N. C.

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PLATS, PRICES AND ANY DESIRED INFORMATION PROMPTLY FURNISHED ON APPLICATION TO

W. F. TROGDON, Secretary and Treasurer,

NORTH WILKESBORO, N. C.



# As A LOCATION for Manufactures

Of Iron and Wood and for General Industrial and  
Business Enterprises.

## FRONT ROYAL, VA.

INVITES INVESTIGATION.

---

Its location, at the junction of the Norfolk & Western Railroad (Shenandoah Valley line) and the Richmond & Danville's branch, give it excellent transportation facilities. It is only a few hours' ride distant from Washington.

The Norfolk & Western's direct line to Washington will be built from Front Royal.

---

*There is no Finer Agricultural Country in the World than the Famed Shenandoah Valley, in which Front Royal is Located.*

---

A WIDE RIVER WITH SWIFT CURRENT FURNISHES WATER POWER  
AND MAKES DRAINAGE PERFECT.

---

Front Royal is a Prosperous Town, with an Extensive Mercantile Business  
and Many Manufacturing Enterprises in Operation and  
Under Construction.

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INVESTIGATION OF ITS ADVANTAGES IS INVITED BY THE

Front Royal---Riverton Improvement Company,

FRONT ROYAL, VIRGINIA.

# Alphabetical Index of Advertisers.

FOR "CLASSIFIED INDEX" SEE PAGES 3, 5 AND 7.

<b>A</b>	Acme Roofing Co. .... 31	Coaldale Brick & Tile Co. .... 39	Hartford Steam Boiler Inspection & Insurance Co. .... 43	Neracher & Hill Sprinkler Co. .... 9	Smith, Saunders & Collins. .... 35
Adams, John N. .... 6	Adams, S. & Son. .... 38	Cochran, A. M. .... 26	Hartman Mfg. Co. .... 47	New England Vent. & Heat Co. .... 34	Smith, S. Morgan. .... 40
Adams & Woodson. .... 6	Ajax Iron Works. .... 19	Coggswell, M. C. .... 10	Hartsfield Furnace & Refining Co. .... 23	New Process Twist Drill Co. .... 29	Smith & Vaile Co. .... 40
Akron Tool Co. .... 33	Albro, The E. D., Co. .... *	Colie, J. J., & Co. .... 27	Heffernan, Wm. A. .... 8	New York Belt'g & Pack'g Co., Ltd. .... 11	Solicitors of Patents. .... 23
Allfree, The J. B., Mfg. Co. .... 48	Allis, The Edw. P., Co. .... 18	Coldewe, G. .... 33	Help Wanted. .... 28	New York Domestic Gas Mch. Co. .... 8	Soule Steam Feed Works. .... 9
Alsing, J. R., Co. .... 14	American Bridge & Iron Co. .... 8	Coleman, H. Dudley, Mch. Co., Ltd. .... 10	Heislner Electric Co. .... 47	New York Equipment Co. .... 25	South Baltimore H. & I. Co. .... 42
American Engine Co. .... 23	American Hoist & Derrick Co. .... 4	Collins & Hackett. .... *	Herring, Doane. .... 24	New York Machinery Depot. .... 25	Southern Fire Brick Works. .... 48
American Imp. Anti-Frict. Met. Co. .... 13	American Ore Machinery Co. .... 14	Columbus City, Ala. .... *	"H. G." .... *	New York Safety S. P. Co. .... 18	Southern Information Bureau. .... 26
American Screw Co. .... 48	American Supply Co. .... 34	Colville, Fulton. .... 26	Hillyer, E. C., & Co. .... 33	Niagara Stamping & Tool Co. .... 10	Southern Iron & Equipment Co. .... 25
American Well Works. .... 32	Anderson Fdy. & Machine Works. .... 40	Comly, Geo. N. .... 6	Holmes, E. & B. .... 36	Nicholson File Co. .... *	Southern Lumber Directory. .... 26
Armstrong-Herschell Co. .... 35	Ashland Fire Brick Co. .... 48	Contractors' Plant Mfg. Co. .... 17	Holton Iron Roofing Co. .... 31	Nordyke & Marmon Co. .... 22	Southern Pacific Co. .... *
Ashley Engineering Co. .... 19	Atkins, E. C., & Co. .... 36	Copeland & Bacon. .... 17	Holyoke Steam Boiler Wks. .... 21	Norman & Evans. .... 35	Southern Real Estate Directory. .... 26
Atkins, E. C., & Co. .... 36	Ault & Wiborg Co. .... *	Cordesman, Meyer & Co. .... 38	Hopkins & Townsend. .... 13	North American Metaline Co. .... 9	Sprout, Waldron & Co. .... 15, 16
Aultman & Taylor Machinery Co. .... 21	<b>B</b>	Corres, School of Mines, The. .... 9	Hopkins, Dwight & Co. .... 24	Northampton Emery Wheel Co. .... 30	Stafford, Geo. W., Mfg. Co. .... 35
Babcock & Wilcox Co. .... 19	Balderston, H., & Son. .... 9	Cortright Metal Roofing Co. .... 26	Hopkins, E. M. .... 25	Norton Emery Wheel Co. .... 30	Stafford, E. H., Co. .... 4
Baldwin Locomotive Works. .... 13	Baltimore Engraving Co. .... 43	Covert Mfg. Co. .... 29	Houston, Stanwood & Gamble. .... 20	Nye & Tredick. .... 35	Standard Guano & Chem. Mfg. Co. .... 24
Balto. Malleable Iron & S. C. Co. .... 13	Baltimore Storage & Light. Co. .... 43	Covington Machine Co. .... 12	Howard Foundry & Machine Wks. .... 27	Oakley & Keating. .... 39	Standard Paint Co. .... 31
Barnes, W. F. & John, Co. .... 12	Barrath, Edward, & Co. .... 6	Crandall Packing Co. .... 41	Howard-Harrison Iron Co. .... 41	Office Specialty Mfg. Co. .... 4	Standard Steel Works. .... 39
Bass Foundry & Machine Works. .... 26	Bates, Jas. .... 6	Crompton Loom Works. .... 34	Howard Hydraulic Cement Co. .... 17	Oil Well Supply Co. .... 40	Starrett, L. S. .... 9
Bauer, A. G. .... 6	Bay Line. .... 43	Cronk Hanger Co. .... 10	Hyde, Geo. A. .... 42	Otis Bros. & Co. .... 27	Stedman's Fdy. & Machine Wks. .... 15
Beach, H. L. .... 39	Beckett Foundry & Machine Co. .... 14	Cumner, F. D., Sons Co. .... 16	<b>I</b>	Otis, G. E. .... 24	Steel Rail Supply Co. .... 25
Belden Machine Co. .... 9	Bell, David. .... 8	Curran, Jas. H. .... 8	Indiana Machine Works. .... 37	Otto Gas Engine Works. .... 22	Stein, Walter M. .... 6
Bement, Miles & Co. .... 12	Bentel & Margedant Co. .... 38	Curtis Steel Roofing Co. .... 31	Ingersoll Milling Machine Co. .... 29	Owen & Margeson. .... 35	Steuart, Arthur. .... 23
Berger Bros. .... 31	Berger Mfg. Co. .... 31	Cushman Iron Co. .... 47	Ingersoll-Sergeant Drill Co. .... 2	Pancoast & Maule. .... 11	Stevens, Arthur L. .... 6
Bernsee, C. D. .... 39	Berryman, Jas. .... 20	Cyclone Pulverizing Co. .... 14	International Ry. Equip. & Sup. Co. .... 25	Peacock, George. .... 17	Stevens, Henry, Sons. .... 48
Bertolotto, Chester, & Co. .... 25	Bierce, Wil. W. .... 24	<b>D</b>	Iron Masters' Laboratory. .... 6	Pech Mfg. Co. .... 40	Stieff, Chas. .... 43
Bickford, H. .... 48	Billings & Spencer Co. .... 12	Davidson Ventilating Fan Co. .... 8	<b>J</b>	Penberthy Injector Co. .... 48	Stilwell & Bierce Mfg. Co. .... 21
Bishop, Thos. F., & Co. .... 12	Bixby, W. H. .... 21	Davis, A. S. .... 21	Jackson, Luis, Industrial Commr. .... *	Penfield, J. W., & Son. .... 32	St. Louis Steel Wire Brush Co. .... 21
Blakeslee Mfg. Co. .... 40	Bliss, E. W., Co. .... 48	Day, J. H., & Co. .... *	Jeffrey Mfg. Co. .... 16	Pennsylvania Machine Co., Ltd. .... 25	Stow Flexible Shaft Co., Ltd. .... 9
Bliss Engineering Co. .... 47	Bolles, J. E., & Co. .... *	Dean Bros. Steam Pump Works. .... 40	Jenkins Bros. .... 8, 48	Pennsylvania Steel Co. .... 13	Stow Mfg. Co. .... 9
Boomer & Boschert Press Co. .... 23	Bordens' Clay County Woodwkg Co. .... 21	Delbert Engineering Co., Ltd. .... 21	Johns, H. W., Mfg. Co. .... 16	Philadelphia Eng. Works, Ltd. .... 6	Streeter, Alvin. .... 29
Bostwick Metal Lath Co. .... 26	Bottiger, Gustaf. .... 6	DeLew & Bailey. .... 27	Jones, Dudley E., Co. .... 35	Photo-Electrotype Engraving Co. .... 43	Stuebner, G. L., & Co. .... 9
Bouldin, E. E. .... 26	Bradley & Co. .... 12	Deming Co. .... 40	Jordan & MacLeod. .... 27	Piedmont Air Line. .... 6	Sturtevant, B. F., Co. .... 10
Bradley Fertilizer Co. .... 15	Bradstreet Co. .... 42	Devlin, Thomas, & Co. .... 12	Jory & Co. .... 24	Pierce, Josiah, Jr. .... 6	Sturtevant Mill Co. .... 14
Brennan & Co. .... 37	Brewer, H., & Co. .... 32	Dewey, Frederic P. .... 6	<b>K</b>	Place, George. .... 25	Sullivan Machinery Co. .... 17
Bristol's Mfg. Co. .... 48	Brooks, Sam L. .... 24	Dixon, Jos., Crucible Co. .... 13	Kanneberg Roofing Co. .... 31	Place, George, Machine Co. .... 25	Talbot & Sons. .... 19
Brooks, T. H., & Co. .... 39	Brown Hoist. & Con. Machine Co. .... 7	Dolph, A. M., Co. .... 39	Keasbey & Mattison Co. .... 22	Plaza Hotel. .... 42	Talbot, Ed. N. Kirk. .... 6
Brown & King Supply Co. .... 34	Brownell & Co. .... 18	Dopp, H. Wm., & Son. .... 30	Kehrhahn & Co. .... 21	Poole, Herman. .... 8	Taper-Sleeve Pulley Works. .... 35
Bruswick Terminal Co. .... 13	Buckeye Engine Co. .... 18	Downie Bros. & Nevin. .... 40	Kells & Sons. .... 32	Porter, H. K., & Co. .... 13	Teague & Marye. .... 6
Bucyrus Stm. Shov. & Fiedg. Co. .... 4	Buffalo Scale Co. .... 27	Draper, Geo., & Sons. .... 22	Kelly Bros. .... 4	Potts, C. & A., & Co. .... 32	Texas Coal Tar & Asphaltum Co. .... 31
Burns Mfg. Co. .... 38	Burns, Ino. F., Machine Co. .... 17	Draper Machine Tool Co. .... 14	Kelly, O. S., Co. .... 16	Powell, Wm., Co. .... 30	Thurber, C. F. .... *
<b>C</b>	Cabell, L. Breckinridge. .... 24	Drew, Baldwin & Co. .... 6	Kennedy, Julian. .... 6	Power, Geo. C., Industrial Com'r. .... 43	Tift, Geo. W., Sons & Co. .... 18
Caldwell, H. W., & Son Co. .... 2	Caldwell Co., W. E. .... 10	Dudley, S. A. .... 34	Kilburn, Lincoln & Co. .... 35	Prentiss Tool & Supply Co. .... 25	Tobin, James F. .... 43
Calhoun & Co. .... 6	Cambridge Roofing Co. .... 31	Dufur, C. .... 9	King & Co. .... 24	Prybil, P. .... 38	Tod, William, & Co. .... 18
Cameron, A. S., Steam Pump Wks. .... 41	Cameron & Barkley Co. .... 11	Dunning, W. D. .... 15	<b>L</b>	Providence Steam & Gas Pipe Co. .... 39	Todd Pulley & Shafting Works. .... 48
Canton Steel Roofing Co. .... 31	Cardwell Machine Co. .... 31	<b>E</b>	Lake, J. H. & D., Co. .... 48	Pulsometer Steam Pump Co. .... 41	Toledo Machine & Tool Co. .... 10
Carlin's Sons, Thos. .... 33	Carnell, George. .... 33	Eagle Boiler Works. .... 19	Lancaster, Jas. H. .... 15	Queen & Crescent Railroad. .... *	Toledo Wire & Iron Works. .... 47
Carver Cotton Gin Co. .... 34	Case, J. I., Threshing Mch. Co. .... 16	Edbrooke, W. J. .... 24	Landreth, Olin H. .... 6	Queen City Supply Co. .... 39	Toomey, Frank. .... 24
Central Machine Works. .... 33	Chambers Brothers Co. .... 32	Egan Co., The. .... 36	Ledoux Chemical Laboratory. .... 6	<b>R</b>	Trench, Daniel G., & Co. .... 10
Champion Iron Co. .... 15	Chandler & Taylor Co. .... 15	Ehret-Warren Mfg. Co. .... 30	Lemon, George E. .... 48	Racine Hardware Mfg. Co. .... 20	Trenton Iron Co. .... 13
Charleston Lead Co. .... 11	Chase, John C. .... 6	Electrical Engineering & Supply Co. .... 27	Leffell, W. C., Co. .... 21	Radford Pipe & Foundry Co. .... 41	Trevor Mfg. Co. .... 37
Chattanooga Fdy. & Pipe Works. .... 43	Chester Steel Castings Co. .... 13	Eller, J. H., & Co. .... 31	Leoford, A. .... 6	Rand Drill Co. .... 17	Tucker, Irwin. .... 23
Church, Isaac. .... 32	Cincinnati Corrugating Co. .... 31	Emerson, Smith & Co. .... 37	Leonard, H. Ward, & Co. .... 9	Rasch, A., & Son. .... 31	Tudor Boiler Mfg. Co. .... 19
Clark, Geo. M. .... 24	Clark, Geo. P. .... 29	Empire Paint & Roofing Co. .... 31	Lidgerwood Mfg. Co. .... 4	Ravenna Boiler Works. .... 18	Turman, Solon B. .... 24
Clark, W. J., & Co. .... 4	Clay, The Oliver P., Co. .... 4	Employers' Lia. Assur. Cor., Ltd. .... 22	Lincoln Iron Works. .... 17	Reeves, Paul S. .... *	Tysen, J. R., Co. .... 24
Cleveland & Hardwick. .... *	Cleveland Twist Drill Co. .... 29	Enterprise Boiler Co. .... 19	Lingham Dado Machine Co. .... *	Remington Machine Co. .... 33	<b>U</b>
Cline Engine & Machine Co. .... 18	<b>D</b>	Evans, George A. .... 25	Link-Belt Engineering Co. .... 16	Richards, Ernest V. .... 8	Union Foundry & Machine Works. .... 14
	Davidson Ventilating Fan Co. .... 8	Exchange Banking & Trust Co. .... 23	Lodge & Davis Machine Tool Co. .... 25	Richardson, C. F. .... 9	Union Mining Co. .... 48
	Davis, A. S. .... 21	<b>F</b>	Lombard, Geo. R., & Co. .... 19	Richardson, J. H., & Co. .... 23	Urie Dredge Mfg. Co. .... 4
	Day, J. H., & Co. .... *	Fitzsimons & Co. .... *	Lone Star Plaster Co. .... 17	Richmond & York River Line. .... 43	U. S. Machine Co. .... 38
	Dean Bros. Steam Pump Works. .... 40	Fletcher & Thomas. .... 32	Long & Allstatter Co. .... 12	Richmond Loco. & Mch. Wks. .... 13	U. S. Mineral Wool Co. .... 31
	Delbert Engineering Co., Ltd. .... 21	Foos Mfg. Co. .... 12	Louisville Fire Brick Works. .... 48	Ries Electric Specialty Co. .... 27	<b>V</b>
	DeLew & Bailey. .... 27	Forrest Silver Bronze Packing Co. .... 9	Lovell Mfg. Co. .... 28	Roanoke Mineral Wool Co. .... 31	Valk & Murdoch Iron Works. .... 21
	Deming Co. .... 40	Forsyth, S. C., Machine Co. .... 37	Lowell Machine Shop. .... 34	Robins, A. K., & Co. .... 10	Valley Iron Works. .... 19
	Devlin, Thomas, & Co. .... 12	Fosteria Steel Roofing Co. .... 31	Lubroleine Oil Co. .... 11	Robinson & Orr. .... 25	Valley Pump Co. .... *
	Dewey, Frederic P. .... 6	Freese, E. M., & Co. .... 32	Ludlow-Saylor Wire Co. .... 47	Robinson, Wm. C., & Son. .... 11	Valley Railway. .... *
	Dixon, Jos., Crucible Co. .... 13	Frederick, S. W. .... 6	Ludlow Valve Mfg. Co. .... 41	Rochester Machine Tool Works. .... 8	Van Duzen & Tift Co. .... 40
	Dolph, A. M., Co. .... 39	Frick Co. .... 18	Luray Artistic Wood Co. .... 39	Rockford Electric Mfg. Co. .... 47	Van Duzen Gas & Gaso. Engine Co. .... 8
	Dopp, H. Wm., & Son. .... 30	Frisbee Lurop Mill Co. .... 14	<b>M</b>	Rocky Mount, N. C. .... 42	Van Noorden, E., & Co. .... 26
	Downie Bros. & Nevin. .... 40	Fritz, George J. .... 39	Main Belting Co. .... 39	Ross, Josiah. .... 38	Van Wagoner & Williams Co. .... 9
	Draper, Geo., & Sons. .... 22	Froehling, Dr. Henry. .... 6	Males, A. S., & Co. .... 28	Rowley & Hermance Co. .... 36	Van Winkle Gin & Machinery Co. .... 34
	Draper Machine Tool Co. .... 14	Furness Line. .... 43	Manly Machine Co. .... 24	Rust Well Works. .... 40	Variety Machine Co. .... 8
	Drew, Baldwin & Co. .... 6	<b>G</b>	Mansfield, H. H. .... 25	Ryan-McDonald Mfg. Co. .... 17	Vulcan Iron Works Co. .... 4
	Dudley, S. A. .... 34	Gambrell, C. A., Mfg. Co. .... 43	Makepeace, C. R., & Co. .... 6	<b>S</b>	<b>W</b>
	Dufur, C. .... 9	Gandy Belting Co. .... 11	Marion Steam Shovel Co. .... 2	Safety Elevator Brake Co. .... 8	Walburn-Swenson Co. .... 24
	Dunning, W. D. .... 15	Gates Bros. & Sharp. .... 8	Marmaduke, W. W. .... 25	Salem Battery Co. .... 24	Walker Mfg. Co. .... 27
	<b>E</b>	General Electric Co. .... 47	Marston, J. M., & Co. .... *	Sampson, T. H. .... 23	Walker & Elliott. .... 11
	Eagle Boiler Works. .... 19	Gibbs, W. H., Jr., & Co. .... 6	Maryland Steel Co. .... 32	Sampson Cordage Works. .... *	Walker, E. Tool Co. .... *
	Edbrooke, W. J. .... 24	Glamorgan Co., The. .... 41	Maslin, John, & Son. .... 40	Sanderson, John. .... 6	Walham Emery Wheel Co. .... 30
	Egan Co., The. .... 36	Glascock & Co., Ltd. .... 38	McCauley, John M. .... 6	Sanders & Stayman. .... 43	Walton, P. M. .... 16
	Ehret-Warren Mfg. Co. .... 30	Globe Dry Kiln Co. .... 39	McClure & Maxwell. .... 24	Sauder, J. M., & Co. .... 23	Walworth Run Foundry & Mfg. Co. .... 33
	Electrical Engineering & Supply Co. .... 27	Globe Iron Roofing & Cor. Co. .... 31	McEwen, J. H., Mfg. Co. .... 21	Saunders, D. Sons. .... 41	Warfield, S. D., Co. .... 19
	Eller, J. H., & Co. .... 31	Globe Machine Works. .... 19	McGowan, John H., Co. .... 41	Scheele, Dr. Walter Th. .... 6	Washington Hyd. Press Brick Co. .... 32
	Emerson, Smith & Co. .... 37	Godfrey, L. .... 25	McKaig Iron & S. Shalting Wks. .... 39	Schubert, C. .... 9	Washington, La. .... 42
	Empire Paint & Roofing Co. .... 31	Godfrey & Finley Iron Works. .... 20	McLanahan & Stone. .... 39	Sebastian Lathe Co. .... 12	Waters & Garland. .... 35
	Employers' Lia. Assur. Cor., Ltd. .... 22	Goodell & Waters. .... *	McNaull Machine & Foundry Co. .... 7	Seim & Co., Henry. .... 8	Webster, Camp & Lane Mch. Co. .... 20
	Enterprise Boiler Co. .... 19	Graham, J. S., & Co. .... *	Mechanical Gold Extractor Co. .... *	Sharon Boiler Works. .... *	Webster Mfg. Co. .... 4
	Evans, George A. .... 25	Graham Twist Drill & Chuck Co. .... 29	Merchants & Miners' Transp. Co. .... 43	Sharon Fire Brick Works. .... 39	Weir Frog Co. .... 4
	Exchange Banking & Trust Co. .... 23	Grant Corundum Wheel Mfg. Co. .... 30	Meridian Foundry and Mch. Shops. .... 12	Shepherd, H. L. .... 9	Weiss & Vilter Mfg. Co. .... 2
	<b>F</b>	Graves Elevator Co. .... 27	Mey, F. H. C. .... 9	Shimer, Samuel J., & Sons. .... 37	Well Rustless Iron Co. .... *
	Fitzsimons & Co. .... *	Gravety Furnier Co. .... 8	Meyers, Fred. J., Mfg. Co. .... 47	Shipman Engine Co. .... 20	Western Maryland Railroad. .... 2
	Fletcher & Thomas. .... 32	Greaves & Khasman. .... 38	Middleton, Oliver & Co. .... 6	Shoemaker, A. T. .... 25	Whaley, W. B. Smith. .... 6
	Foos Mfg. Co. .... 12	Greet Machinery Co. .... 6	Millon Safe & Iron Works. .... 10	Shryock, Thos. J., & Co. .... 24	Wheeland's Foundry & Mch. Wks. .... 9
	Forrest Silver Bronze Packing Co. .... 9	Grissold & Nunan. .... 6	Miller Mfg. Co. .... *	Silver Mfg. Co. .... 10	White, Jno. A., Co. .... 3
	Forsyth, S. C., Machine Co. .... 37	Gulf Bag Co. .... 9	Minnigerode, Wm. .... 25	Simmons, John, Co. .... 47	Whitinsville Spinning Ring Co. .... 26
	Fosteria Steel Roofing Co. .... 31	<b>H</b>	Monroe Mfg. Co. .... 17	Sims Mfg. Co. .... 37	Whitman & Barnes Mfg. Co. .... 20
	Freese, E. M., & Co. .... 32	Hackney Hammer Co. .... 12	Montross Metal Roofing Co. .... 31	Smith, Jas. Woolen Machy. Co. .... 2	Whitney, R. M., & Sons. .... 26
	Frederick, S. W. .... 6	Haines, Jones & Cadbury Co. .... 30	Moore Mfg. & Foundry Co. .... 31	Smith, H. B., Machine Co. .... 38	Whitney, R. M., & Sons. .... 26
	Frick Co. .... 18	Harrington, E., Son & Co. .... 2	Moore & White Co. .... 2	<b>Z</b>	Williams Bros. .... 39
	Frisbee Lurop Mill Co. .... 14	Harrington & King Perforat'g Co. .... 28	Mordant, F. S., Co. .... 42	Zeigler, D. G. .... 6	Williams, John L., & Son. .... 23
	Fritz, George J. .... 39	Harrisburg Fdy. & Mch. Works. .... 19	Morgan, F. B. S. .... 23		Williams Mfg. Co. .... 37
	Froehling, Dr. Henry. .... 6	Harris, H., & Co. .... 25	Morris Machine & Iron Co. .... 20		Williams, W. I. .... 27
	Furness Line. .... 43	Harris, N. W. & Co. .... *	Morris Machine Works. .... *		Williamsport Machine Co. .... 37
	<b>G</b>	Hartford, R. F. .... *	Morris, Williams & Co. .... 27		Williams, W. I. .... 27
	Gambrell, C. A., Mfg. Co. .... 43		Morton, Edward, & Co. .... 23		Wilson & Huggins. .... 27
	Gandy Belting Co. .... 11		Mosser, W. F., & Son. .... 14		Wood, G. T., Mfg. Co. .... 33
	Gates Bros. & Sharp. .... 8		Murray, James, & Son. .... 14		Worral, Thos. P. .... 23
	Gibbs, W. H., Jr., & Co. .... 6		<b>N</b>		Worthington, Henry R. .... 22
	Glamorgan Co., The. .... 41		National Cotton Gin Co. .... 34		Wyckoff, A., & Son. .... 48
	Glascock & Co., Ltd. .... 38				
	Globe Dry Kiln Co. .... 39				
	Globe Iron Roofing & Cor. Co. .... 31				
	Globe Machine Works. .... 19				
	Godfrey, L. .... 25				
	Godfrey & Finley Iron Works. .... 20				
	Goodell & Waters. .... *				
	Graham, J. S., & Co. .... *				
	Graham Twist Drill & Chuck Co. .... 29				
	Grant Corundum Wheel Mfg. Co. .... 30				
	Graves Elevator Co. .... 27				
	Gravety Furnier Co. .... 8				
	Greaves & Khasman. .... 38				
	Greet Machinery Co. .... 6				
	Grissold & Nunan. .... 6				
	Gulbert, John C. N. .... 9				
	Gulf Bag Co. .... 9				

\* Not in this issue.









# General Electric Company.

44 Broad St., New York City. 620 Atlantic Ave., Boston, Mass.



Is the **ONLY INCANDESCENT LAMP**  
LAWFULLY MADE.

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ALL OTHERS INFRINGE THE EDISON PATENTS AND ARE COUNTERFEITS.

See decision of United States Circuit Court of Appeals in case of Edison Electric Light Company vs. United States Electric Light Company, decided October 19th, 1892.  
See decision of United States Circuit Court of Appeals in case of Edison Electric Light Company and Edison General Electric Company, against Sawyer-Man Electric Company, decided Dec. 5, 1903. Copies of these decisions will be sent on application.

## BRANCH OFFICES:

173 and 175 Adams Street, Chicago, Illinois.  
264 West Fourth Street, Cincinnati, Ohio.  
Gould Building, Atlanta, Georgia.  
15 First Street, San Francisco, California.  
Masonic Temple, Denver, Colorado.

620 Atlantic Avenue, Boston, Mass.  
34 Broad Street, New York  
509 Arch Street, Philadelphia, Pennsylvania.  
1333 F Street, N. W., Washington, D. C.  
401-407 Sibley Street, St. Paul, Minnesota.

## HEISLER ELECTRIC COMPANY, Manufacturing and Constructing Electrical Engineers

Office - 808 Duane Building, Philadelphia, Pa.  
Works - 40th Street, N. Y. C.

We make a specialty of the complete installation of our IMPROVED LONG DISTANCE SERIES SYSTEM with reduction coils for reducing the voltage for domestic illumination, and permitting the use of meters if desired.

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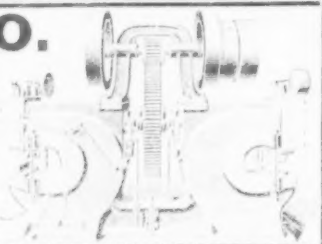
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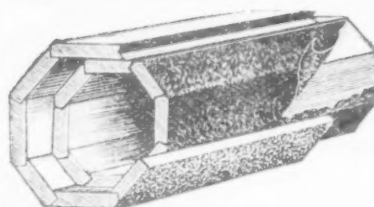
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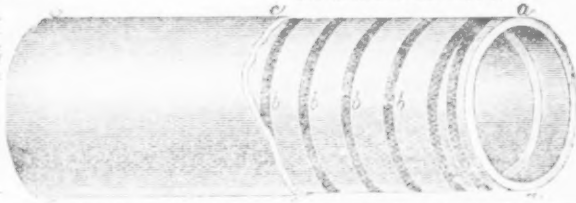
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